Master Hunter Handbook





Washington Department of Fish and Wildlife Wildlife Program Hunter Education Division April 2018

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The information contained in this handbook was collected from the Washington Department of Fish and Wildlife website (wdfw.wa.gov) and its employees unless otherwise cited. (2016)

Introduction

The Washington Department of Fish and Wildlife's (department or WDFW) Master Hunter Permit Program (MHPP) was created in 2008, replacing the aging Advanced Hunter Education Program. It was developed to promote safe, ethical, responsible, and legal hunting; promote support in the general public for hunting; promote the highest standards of hunting; enhance landowner-sportsman relations; engage program applicants and participants in volunteer conservation projects that benefit wildlife, wildlife habitat, promote hunting access on private land, and the associated agency priorities; and develop a corps of Master Hunters that can be engaged in addressing highly sensitive wildlife depredation issues.

Master Hunters are ambassadors of safe, ethical, responsible, and legal hunting in Washington and should conduct themselves as role models for the hunting community. They give back to the resource through their volunteer work and help promote safe and ethical hunting. To renew a Master Hunter permit, Master Hunters need to complete at least 40 hours of volunteer service on projects benefiting wildlife resources in the five years they are certified.

Master Hunters are held to a higher ethical standard than most hunters by the department and the public. When a person becomes a Master Hunter, their actions during hunting and fishing should be above reproach. All hunting actions should be completed to the highest ethical standards to increase public support and relations with landowners and the non-hunting public.



This handbook includes some of the information that Master Hunters are expected to know to be successful stewards of the hunt. Master Hunters are called upon to remove deer and elk causing damage in certain situations. These situations are generally in highly visible areas or areas where there are significant safety concerns. The department has many tools that it can use to address wildlife caused damage, and Master Hunters are one of those tools. Handling oneself in a professional manner on all Master Hunter damage hunts will help ensure the continued use of Master Hunters in damage situations.

WDFW Mission and Goals

Our Mission

To preserve, protect and perpetuate fish, wildlife and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities.

Vision

Conservation of Washington's fish and wildlife resources and ecosystems.

WDFW defines conservation as protection, preservation, management, or restoration of natural environments and the ecological communities that inhabit them, including management of human use for public benefit and sustainable social and economic needs. (Adapted from The American Heritage® Science Dictionary Copyright © 2005)

Department Goals

To achieve its mission, WDFW will continue to focus its activities on the following four goals:

- Goal 1: Conserve and protect native fish and wildlife
- Goal 2: Provide sustainable fishing, hunting, and other wildlife-related recreational and commercial experiences
- Goal 3: Promote a healthy economy, protect community character, maintain an overall high quality of life, and deliver high-quality customer service
- Goal 4: Build an effective and efficient organization by supporting our workforce, improving business processes, and investing in technology

Fish and Wildlife Commission

The Washington Fish and Wildlife Commission consists of nine members serving six-year terms. Members are appointed by the governor and confirmed by the senate. Three members must reside east of the summit of the Cascade Mountains, three must reside west of the summit, and three may reside anywhere in the state. No two commissioners may reside in the same county.

While the commission has several responsibilities, its primary role is to establish policy and direction for fish and wildlife species and their habitats in Washington and to monitor the department's implementation of the goals, policies, and objectives established by the commission. The commission also classifies wildlife and establishes the basic rules and regulations governing the time, place, manner, and methods used to harvest or enjoy fish and wildlife.

The commission receives its authority from the passage of Referendum 45 by the 1995 Legislature and public at the 1995 general election. The commission is the supervising authority for the department. With the 1994 merger of the former Departments of Fisheries and Wildlife, the commission has comprehensive species authority as well.

Through formal public meetings and informal hearings held around the state, the commission provides an opportunity for citizens to actively participate in management of Washington's fish and wildlife.

What it takes to become a Master Hunter

To become a certified Master Hunter, each applicant is required to complete the following requirements before the certification deadline noted in the applicant letter.

- Be a Washington resident as defined in RCW 77.08.010 (39)
- Demonstrate proficiency with at least one of the following implements: Bow, handgun, muzzleloader, rifle, shotgun shooting shot, shotgun shooting slugs, or crossbow.
 - See the scoring your shooting instructions online at https://wdfw.wa.gov/hunting/requirements/master-hunter/program-requirements.
- Provide at least 20 hours of volunteer service on projects benefiting wildlife resources.
 (There is also a volunteer requirement to renew a Master Hunter certification. Please see recertification requirements here:
 https://wdfw.wa.gov/hunting/requirements/master-hunter/program-requirements
- Receive a score of at least 80 percent on a written examination, which covers information contained within the provided independent study materials.
- Sign an agreement to abide by the Master Hunter Code of Ethics.
- Submit to and pass a law enforcement background check.
- Register as a WDFW volunteer via the online CERVIS site, which is found on the department's volunteer program website, or the paper volunteer registration form.

The applicant must not have:

- Paid the required fine or been convicted within the last ten (10) years of a Chapter 77.15 RCW offense;
- Paid the required fine or been convicted within the last ten (10) years of criminal trespass, reckless endangerment, criminal conspiracy, or making a false statement to law enforcement, while hunting, fishing, or engaging in any activity regulated by WDFW;
- Prior felonies prohibiting the possession of firearms, unless firearm possession is reinstated; or
- A current hunting or fishing license revocation or a current suspension of hunting or fishing license privileges in Washington or in another state.

Once all training and certification requirements are complete, successful applicants will receive a patch as recognition for their accomplishments. A personalized Master Hunter Permit with the person's name, Master Hunter number, issue date, and renewal date will also be provided. Applications for the Master Hunter Permit Program will only be accepted during the open enrollment period noted on the departments MHPP webpage.

MHPP RCWs and WACs

Statutory law and administrative regulations are always subject to change. The laws and regulations contained in hunting and fishing pamphlets are often only summarized from the complete text of the law or regulation.

"RCW" is the standard abbreviation for the Revised Code of Washington, which represents laws passed by the Legislature and signed into law by the governor. Such laws are subject to change only through the legislative process.

"WAC" is the standard abbreviation for the Washington Administrative Code, which represents administrative regulations adopted by either the Fish and Wildlife Commission or the WDFW director. Such administrative regulations are delegated to those bodies by the Legislature via RCWs. Administrative regulations are subject to change in accordance with the rule-making procedures established by the Washington Administrative Procedures Act (Chapter 34 RCW).

RCW title 77 is the section of statutes that pertains to WDFW. WAC 220 is the WAC title under which the department creates rules. The complete statutes and department rules, as well as all other state statutes and rules, can be found on the Washington State Legislatures website: http://leg.wa.gov/.

The MHPP has two RCWs, RCW 77.32.570 and RCW 77.15.760, that detail what the department can do with and for the program. There is also a WAC, WAC 220-412-030, which governs suspensions of Master Hunters.

RCW 77.32.570 - Master Hunter permit program—Fee.

- (1) In order to effectively manage wildlife in areas or at times when a higher proficiency and demonstrated skill level are needed for resource protection or public safety, the department establishes the Master Hunter permit program. The Master Hunter permit program emphasizes safe, ethical, responsible, and lawful hunting practices. Program goals include improving the public's perception of hunting and perpetuating the highest hunting standards.
- (2) A Master Hunter permit is required to participate in controlled hunts to eliminate problem animals that damage property or threaten public safety. The commission may establish by rule the requirements an applicant must comply with when applying for or renewing a Master Hunter permit, including but not limited to a criminal background check. The director may establish an advisory group to assist the department with administering the Master Hunter [permit] program.
- (3) The fee for an initial Master Hunter permit may not exceed fifty dollars, and the cost of renewing a Master Hunter permit may not exceed twenty-five dollars. Funds generated under this section must be deposited into the fish and wildlife enforcement reward account established in RCW 77.15.425, and the funds must be used exclusively to administer the Master Hunter [permit] program.

RCW 77.15.760 - Suspension of a Master Hunter permit—Appeal hearing.

- (1) The department may suspend a person's Master Hunter permit for the following reasons and corresponding lengths of time:
- (a) If the person pays the required fine or is found to have committed an infraction under this chapter or the department's rules, the department shall suspend the person's Master Hunter permit for two years;
- (b) If the person pays the required fine or is convicted of a misdemeanor, gross misdemeanor, or felony under this chapter, the department shall suspend the person's Master Hunter permit for life;
- (c) If the person pays the required fine or is convicted of trespass, reckless endangerment, criminal conspiracy, or making a false statement to law enforcement while hunting, fishing, or engaging in any activity regulated by the department, the department shall suspend the person's Master Hunter permit for life;
- (d) If the person pays the required fine or is convicted of a felony prohibiting the possession of firearms, unless firearm possession is reinstated, the department shall suspend the person's Master Hunter permit for life;
- (e) If the person has a hunting or fishing license revoked or has hunting or fishing license privileges suspended in another state, the department shall suspend the person's Master Hunter permit for life;
- (f) If the person is cited, or charged by complaint, for an offense under this chapter; or for trespass, reckless endangerment, criminal conspiracy, or making a false statement to law enforcement while hunting, fishing, or engaging in any activity regulated by the department, the department may immediately suspend the person's Master Hunter permit until the offense has been adjudicated; or
- (g) If the person submits fraudulent information to the department, the department shall suspend the person's Master Hunter permit for life.
- (2) Any Master Hunter who is notified of an intended suspension may request an appeal hearing under chapter 34.05 RCW.

WAC 220-412-030 - Master Hunter permit program

- (1) In order to effectively manage wildlife in areas or at times when a higher proficiency and demonstrated skill level are needed for resource protection or public safety, the department establishes the Master Hunter permit program.
- (2) The Master Hunter permit program emphasizes safe, ethical, responsible, and lawful hunting practices. Program goals include improving the public's perception of hunting and perpetuating the highest hunting standards. A Master Hunter permit is required to participate in controlled hunts to eliminate problem animals that damage property or threaten public safety.
- (a) The cost of initially applying for a Master Hunter permit shall be fifty dollars. The cost of renewing a Master Hunter permit shall be twenty-five dollars.

- (b) The department shall determine the program's requirements and curriculum. The director shall establish an advisory group to assist agency staff in developing and managing the program.
- (3) Master Hunters are held to the highest ethical standards because these hunters are ambassadors for the department and are role models and mentors for the hunting community and for the public at large. Initial Master Hunter permit applicants must submit to a criminal background check. The department shall deny entry into the Master Hunter permit program to those applicants who have:
- (a) Paid the required fine or been convicted within the last ten years of a chapter 77.15 RCW offense;
- (b) Paid the required fine or been convicted within the last ten years of criminal trespass, reckless endangerment, criminal conspiracy, or making a false statement to law enforcement, while hunting, fishing, or engaging in any activity regulated by the department;
- (c) Prior felonies prohibiting the possession of firearms, unless firearm possession is reinstated; or
- (d) A current hunting or fishing license revocation or a current suspension of hunting or fishing license privileges in Washington or in another state.
- (4) Master Hunter permit applicants will be required to sign and abide by a hunter code of ethics and pass a comprehensive examination based upon study materials provided by the department. An initial Master Hunter permit applicant found to have submitted fraudulent information to the department or to have cheated on the Master Hunter examination will be excluded from the Master Hunter permit program for life.
- (5) Initial Master Hunter permit applicants who successfully complete the Master Hunter permit program will receive a Master Hunter patch and a Master Hunter permit. The initial Master Hunter permit is valid for five consecutive years from the date of issuance. The permit may be renewed for additional five-year increments if, during each five-year period of validity, the Master Hunter fulfills the renewal requirements established by the department.
- (6) Master Hunters renewing their permit shall authorize the department to conduct a criminal background check each time they renew. The criminal background check will go back five years from the Master Hunter's anniversary date or back to the date this rule amendment was adopted, whichever period of time is shorter. The department's approval will be determined by compliance with this section.
- (7) Persons who successfully complete the Master Hunter permit program and maintain the requirements developed by the department may participate in special hunts. These Master Hunters must possess a valid Master Hunter permit while participating in the hunts.
- (8) The department shall suspend a Master Hunter's permit for life if the Master Hunter:

 (a) Pays the required fine or is convicted of a chapter 77.15 RCW misdemeanor, gross misdemeanor, or felony;

- (b) Pays the required fine or is convicted of criminal trespass, reckless endangerment, criminal conspiracy, or making a false statement to law enforcement, while hunting, fishing, or engaging in any activity regulated by the department;
- (c) Pays the required fine or is convicted of a felony prohibiting the possession of firearms, unless firearm possession is reinstated;
- (d) Has his or her hunting or fishing license revoked, or hunting or fishing license privileges suspended in Washington or in another state; or
 - (e) Submitted fraudulent information to the department.
- (9) A Master Hunter who pays the required fine or is found to have committed an infraction under chapter 77.15 RCW or the department's rules shall have his or her Master Hunter permit suspended for a period of two years.
- (10) If a Master Hunter is cited, or charged by complaint, for a chapter 77.15 RCW offense; or for trespass, reckless endangerment, criminal conspiracy, or making a false statement to law enforcement, while hunting, fishing, or engaging in any activity regulated by the department, the department may immediately suspend the person's Master Hunter permit until the offense has been adjudicated.
- (11) The department's Master Hunter coordinator will maintain open communications with landowners and the community. The department will investigate written accusations about Master Hunters and determine whether such complaints have merit and warrant enforcement action.
- (12) Except under subsection (10) of this section, if a Master Hunter has his or her initial or renewal Master Hunter permit suspended for less than life, and the person wants to become a Master Hunter again, he or she must repeat the entire Master Hunter permit application process once the suspension period is over.
- (13) Any person who has been denied initial admission into the Master Hunter permit program, renewal of his or her Master Hunter permit, or has had his or her Master Hunter permit suspended, has the right to an administrative hearing to contest the agency action. Such hearing will be held pursuant to chapter 34.05 RCW, the Administrative Procedure Act. Initial Master Hunter permit applicants who fail to submit the application fee or who submit an incomplete application will have their application returned. Denial of admission on these grounds does not trigger the right to an administrative hearing.
- (14) "Conviction," as used in this section, is defined in RCW 77.15.050.
- (15) It is unlawful for any person to hunt in a hunt restricted to Master Hunters if such person has not successfully been admitted into the Master Hunter permit program and maintained the requirements set forth in this section, or if the person's Master Hunter permit has been suspended. Master Hunters need a valid Master Hunter permit and a valid hunting license and tag to hunt in Master Hunter restricted hunts. "To hunt," as used in this section, is defined as

"an effort to kill, injure, capture, or harass a wild animal or wild bird," pursuant to RCW 77.08.010(53). Master Hunters who have been issued a disabled hunter permit by the department may only hunt with a designated hunter companion who has been admitted into the Master Hunter permit program and maintained the requirements under this section. Violations of this subsection shall be enforced under RCW 77.15.400 for wild birds, RCW 77.15.410 for big game, and RCW 77.15.430 for wild animals other than big game.

(16) Only Washington residents, as defined in RCW 77.08.010(39), may apply for an initial Master Hunter permit.

Commission Policy

The WDFW Fish and Wildlife Commission (commission) enacted a policy on December 7, 2007, regarding the MHPP. That policy converted the Advanced Hunter Education program to the MHPP and set the groundwork to build the current program. To view the policy document, you can go to the commission policy web page here:

https://wdfw.wa.gov/about/commission/policies/master-hunter-program. The policy states:

Discussion: As the human population of Washington State continues to increase and expand into areas previously used by wildlife, negative interactions between humans and wildlife continue to increase. There are two primary categories of interaction: 1) incidents of humans with potentially dangerous wildlife (cougar, bear, coyote, etc.) and small problem wildlife such as raccoon, possum, rodents, etc.; and 2) large browsing and foraging wildlife, primarily deer and elk.

The scope of this policy addresses category 2 wildlife. Deer and elk populations in Washington have been displaced from some traditional habitat areas by residential outbuilding and development, agricultural expansion and, in some instances, inappropriate use of off-road vehicles including snowmobiles, two- and four-wheel recreational vehicles and other technologies.

In addressing the problem of deer and elk being forced to migrate from their traditional habitats to locations that affect human residential and agricultural resources, the Department will explore two options:

- Develop a comprehensive road management program that defines seasonal and permanent road closures on Department lands and, where possible, on other ownerships to minimize disturbance of wildlife outside of hunting seasons; and
- 2. Develop a Master Hunter program that will:
 - a. provide the necessary hunter assets to resolve deer and elk encroachment that produces significant damage on agricultural lands;
 - b. reduce elk and deer populations in certain residential areas where they are a nuisance;
 - c. reduce wildlife populations in areas where vehicle or accidents with deer and/or elk on public highways is concentrated; and

d. use Master Hunters as appropriate in situations where other wildlife species such as turkeys and geese are a nuisance.

Policy: The Washington Department of Fish and Wildlife will develop a Master Hunter Program that provides an adequate number of hunters, with specific qualifications, to address the wildlife/human interaction outlined in the discussion above.

It must be understood and fundamental to the policy that Master Hunter certification is a privilege and not a right. Further, the Master Hunter resource is a tool that will be employed by the Department to resolve certain human/wildlife conflict situations. These hunting situations will require hunting in areas that may be highly visible to the public and may be on private property. In all cases, these hunting situations will require good judgment and professional conduct by Master Hunters. Violations of hunting rules or regulations will not be tolerated and will result in loss of Master Hunter privileges and possibly all hunting privileges, depending on the violation.

Master Hunters are role models for the rest of the hunting community and, through their actions, act as ambassadors for the Department. Qualifications for the Master Hunter program are:

- 1. No wildlife convictions in violation of WAC rules imposed under the authority of Title 77 RCW within the last ten years;
- 2. Commitment to completing Master Hunter training as outlined by the Department, including the revised Advanced Hunter Training, Eyes in the Woods, etc.;
- 3. Achieve a minimum of 40 hours of service to the Department every 5 years. This may include wildlife population surveys, assistance with hunt administration, creek surveys, manning game check stations, teaching hunter education classes, or other activities that support the Department;
- 4. The Master Hunter Program will have an advisory group that will provide to the Department recommendations on how to improve the Master Hunter Program and will develop processes that improve efficiency and effectiveness of Master Hunter qualification, monitoring, and administration. The advisory group will not be involved in determining when or where Master Hunters will be utilized. This responsibility rests with the Department.
- 5. Master Hunters will consider safety and public perception as fundamentals when engaged in any hunt.

The Director will designate a manager accountable for the Master Hunter Program. The responsibilities of the manager include, but are not limited to:

1. Development of a systematic approach to tracking and monitoring Master Hunters (educational status, service hours accomplished and validated by the Department, background check for violations, and process for updating data) hunter participation and success. No one should get more than two animals of the same species in any one year.

- Development of an Advanced Hunter Education Program, which includes all aspects of hunting safety, public perception, standards of conduct, program focus on problem animals. These are not intended to be trophy hunts.
- 3. Working with regions on the development of meaningful activities that Master Hunters can engage in to support region staff.
- 4. Development of an approach to screen new applicants and recertify current population of Advanced Hunters to Master Hunter status.
- 5. Working with Master Hunters on development of an efficient management and communication network that supports the needs of the Department and the Master Hunters.
- 6. Working with region staff to identify Master Hunter opportunities within the scope outlined above. Development of, within the Master Hunter group, an organization that will assist the Department in planning and administering these hunts.

The Director is accountable to the Commission for staffing the Master Hunter Program and will report on the Master Hunter Program implementation and performance twice annually, or as otherwise requested by the Commission. The Commission recognizes the dynamics of wildlife populations and habits and understands that future wildlife situations may warrant expanded use of Master Hunters.

Wildlife Policy

In 2013, the Hunter Education Division, which manages the MHPP, was transferred within WDFW from the Enforcement Program to the Wildlife Program. At that time, Wildlife Program staff members created a policy on the MHPP which outlines how the department will engage Master Hunters. The complete text is below but can also be found online (https://wdfw.wa.gov/sites/default/files/2019-05/2013 mh policy statement.pdf).

Master Hunters are ambassadors of safe, ethical, responsible, and legal hunting and outdoor recreational activities in Washington and are "stewards of the hunt." Members of the Master Hunter Permit Program (MHPP) give back to the wildlife resource through their volunteer work and help promote and strengthen the heritage of hunting through their actions.

- A. The Wildlife Program administration and staff will work in partnership with the Master Hunter Advisory Group (MHAG) to identify and foster meaningful volunteer opportunities for Master Hunters, and will strive to develop a dependable means of effective coordination and management of Master Hunter volunteer efforts within each WDFW Region. Master Hunter volunteer opportunities will be designed to promote the conservation ethic and address priority needs of the Wildlife Program and the Department.
- B. Master Hunters will be used to help achieve Wildlife Program goals and initiatives through the following:

- Strengthening the conservation ethic and the image and heritage of hunting in Washington by engaging in public outreach related to the role of hunting today and in the future.
- 2. Improving landowner relations through the practice of ethical and responsible hunting.
- Helping to resolve human/wildlife conflicts or public safety issues through the control of game populations causing damage to public and private property.
- 4. Increasing hunter access to private lands through volunteer efforts.
- 5. Increasing recruitment and retention of hunters through participation in Hunter Education Training, Hunter Training Clinics, and mentoring of new hunters.
- 6. Protection and enhancement of important habitats through volunteer projects associated with WDFW Wildlife Areas and Water Access Sites.
- 7. Participating in Citizen Science wildlife data collection.
- 8. Serving in an administrative or coordination capacity for a volunteer network.
- 9. Providing a communications link with the general public to impart accurate information about WDFW's management activities associated with wildlife and hunting.

Master Hunter Advisory Group

The Master Hunter Advisory Group (MHAG) represents Master Hunters statewide, and advises WDFW on issues and opportunities affecting Master Hunters and the MHPP. MHAG's mission is to develop a corps of sportsmen dedicated to preserving the heritage of hunting by giving back to the sport, displaying the highest standards of conduct, and working to conserve wildlife habitat and hunting opportunity. Membership of the MHAG is comprised of at least two Master Hunters from each of the WDFW administrative regions, with the total number of members not exceeding 15.

The MHAG works in partnership with WDFW to identify and foster meaningful volunteer opportunities for hunters and Master Hunters throughout the state. These opportunities are intended to promote the conservation ethic and address priority needs of the Wildlife Program and the department, as well as develop a dependable means of coordination and management of Master Hunter volunteer efforts within each WDFW region. The MHAG and WDFW have identified specific roles for the membership to work on during the four quarterly meetings.

- Provide recommendations on MHPP policy, as requested by the department.
- Provide recommendations on statutes and rules associated with the MHPP, as requested by the department.
- Assist the department in the development of MHPP curriculum, prerequisites, tests, and requirements.
- Review MHPP processes to improve qualifications, monitoring, and administration of the MHPP.

• Provide Master Hunter communication conduits in each of the six administrative regions of the department.

For the complete Master Hunter Advisory Group Purpose, Roles, and Operating Procedures, refer to the MHAG web page (http://wdfw.wa.gov/about/advisory/mhag/).

Master Hunter Permit Program Strategic Plan

The purpose of the MHPP is to focus on the positive aspects of hunting so that hunting will remain a strong element in the management and enjoyment of healthy wildlife populations. This Strategic Plan was developed by WDFW in conjunction with MHAG, and will serve to direct agency and MHAG actions in the implementation and evolution of the MHPP. The plan captures what WDFW and MHAG believe are currently the most important actions to take to promote the MHPP goals. For the purposes of the strategic plan, MHAG has adopted the mission to celebrate and perpetuate the heritage of hunting in Washington state. This mission statement is intended to compliment the group's formal mission, as well as advance the goals of the MHPP by driving specific actions and activities that can be taken by WDFW, MHAG, and Master Hunters to advance the goals of the MHPP.

Some of the current, more pressing issues facing WDFW related to the Master Hunter Permit Program include:

- Improving landowner-sportsman relations
- Promoting access to private land
- Stimulating hunter recruitment, retention, and reactivation/reengagement
- Ensuring the corps of Master Hunters can effectively address wildlife depredation issues in a safe, legal, and ethical manner.

For the complete Master Hunter Permit Program Strategic Plan, refer to the MHAG web page (http://wdfw.wa.gov/about/advisory/mhag/).

Strategic Plan Elements

WDFW, MHAG, and Master Hunters believe the below identified focus areas are of high priority in order to address the current most significant needs. These focus areas received MHAG and WDFW focus beginning in 2015. The below elements may be modified over time to reflect accomplishments and adjustments in priorities.

- Mentored Youth Hunts These hunts may provide a positive and successful hunting experience for youth hunters that may be important to recruit and retain young hunters. Master Hunters can play a key role in providing mentored youth hunts.
- Education and Training Master Hunters may assist in educating, teaching, and training new and existing hunters, as well as other recreationalists.

Improve the Image of Master Hunters and the MHPP – The Master Hunter image was hurt previously by some Master Hunters who were not always being safe, legal, and ethical hunters. Improving the image will lead to wider acceptance of the MHPP and hunting in general.

In addition to the focus areas, MHAG will coordinate with WDFW's Hunter Recruitment, Retention, and Reengagement Advisory Group (HR3AG) via MHAG's representatives on that group and the Hunter Education Division Manager. MHAG will remain abreast of the HR3AG's work and will assist as appropriate with implementing actions consistent with the pending hunter recruitment and retention plan.

Brief History of Hunting

Hunting was a key component in human survival during prehistoric times and continues to serve an important role in many human cultures today. For most of the human race, hunting has moved to a recreational activity due to the increased knowledge of farming and animal husbandry. However, there are some cultures that still rely on hunting for their survival.

When humans discovered how to farm and grow their own food, their need to hunt animals and forage for food decreased. Having a decreased need to hunt and forage gave early humans more leisure time to invent, recreate, and build societies. This leisure time also allowed for the invention and advancement in weaponry. With the advancement in weaponry, warfare became commonplace. Warfare helped create a ruling class of kings and pharaohs. Unfortunately for the common people, these rulers claimed all wildlife as their property and outlawed hunting by anyone not appointed by the ruler.

This system continued for many years in England until several barons revolted. The king decided to appease the barons because they had a substantial advantage and signed the Magna Carta. This document decreed that the barons had natural rights just by existing. It also identified that the rights were independent of the king's will. The Magna Carta is also very important to United States citizens because it was the document the founding fathers referenced when creating the declaration of independence and the United States.

After Columbus landed in the new world, Europeans colonized North America. There were many animals to hunt and trap. The monetary value of some of the animal's pelts turned some colonists into commercial trappers and hunters. This group of trappers and hunters helped explore and colonize other areas and expand westward. However, since there were no game regulations at that time, some species were extirpated in some areas.

In the late 1800s, several people came to realize the abundance of game animals had diminished significantly. These people spoke out against the broad public opinion of the day to work towards conservation. Notable figures of this movement were Theodore Roosevelt, Aldo Leopold, Ralph Waldo Emerson, Henry David Thoreau, George Perkins Marsh, George Bird Grinnell, and Gifford Pinchot. All of these people noticed a need for a conservation ethic and several authored books on the subject.

In 1901, Theodore Roosevelt was sworn into office as the President of the United States after President McKinley was assassinated. He went on to create the United States Forest Service and established 51 wildlife refuges, 18 national monuments, and worked with the legislative

branch of the government to create five National Parks. During his administration, he protected over 230 million acres. Creating these areas ensured wildlife would have a place to live in our evolving country. In 1909, President Roosevelt created the North American Conservation Congress, which included delegates from Canada and Mexico. This congress helped shape conservation and establish game laws to halt the decline of wildlife. These restrictive laws are the foundation that today's conservation is built upon.

However, in 1930, Aldo Leopold and A. Willis Robertson published American Game Policy, which called for changes to the restrictive game regulations, as they were insufficient to stem wildlife's decline. The report spawned a new profession, wildlife management. Aldo Leopold was the first professor in wildlife management.

In the early 1900s, more women became involved in wildlife management and came to be champions of the conservation ethic. Noteworthy women of this era included Rachel Carson, Rosalie Edge, and Margaret "Mardy" Murie. These women helped shape the conservation ethic that is embraced today.

North American Model of Wildlife Management

The title of this model is a little misleading because the model is currently employed by Canada and the United States. It is a set of seven principles that are collectively applied. Those principles are:

- 1. Wildlife resources are a public trust
- 2. Markets for game animals are eliminated
- 3. Allocation of wildlife is by law
- Wildlife can be killed only for a legitimate purpose
- 5. Wildlife is considered an international resource
- 6. Science is the proper tool to discharge wildlife policy
- 7. Democracy of hunting is standard

This model was only recently given a name by Dr. Valerius Geist in the late 90s and early 2000s.

These principles are important because they govern the actions of regulatory agencies like WDFW. Below are explanations of why each of these principles are vital to wildlife management.

Wildlife resources are a public trust

This is the most important piece of the North American model of wildlife management. Since wildlife is not owned by any one person, it is held by the governing body for the benefit of all citizens, current and future. This principle is based on common law in the public trust doctrine.

Markets for game animals are eliminated

In the early stages of the settlement of North America, there was a big market for game animals, and it decimated their populations. By eliminating this practice, the overuse of game

species stopped and some populations were able to recover. Furbearers are the exception to this rule because their hides have a commercial value. However, the seasons and harvest rates on these animals is regulated by wildlife agencies.

Allocation of wildlife is by law

Since wildlife is owned by the public, citizens have a say in how those resources are allocated. This aspect of the North American model allows the public to have input into decisions affecting their wildlife.

Wildlife can be killed only for a legitimate purpose

This principle ensures that wildlife is not killed to be killed. Conservation is the wise use of a resource, and it plays into the principle of sportsmanship and fair chase.

Wildlife is considered an international resource

This principle was identified in the early 1900s. Since some wildlife migrate across political boundaries, such as country borders, it was deemed necessary to identify that wildlife is an international resource to allow international management of wildlife. This is most evident in migratory bird management because waterfowl nest in northern locations and migrate south for the winter months.

Science is the proper tool to discharge wildlife policy

When scientific processes are used to measure the effects on wildlife, managers can use the observed results to better manage wildlife. However, wildlife management agencies do take public opinion and comments into consideration. As such, wildlife management has evolved to integrate biological science and social science to manage wildlife.

Democracy of hunting is standard

In other parts of the world, hunting is a privilege that is reserved for the aristocracy or others who have a special status. Without the support from hunters and anglers, wildlife agencies such as WDFW would not be able to effectively manage wildlife populations and the overall

conservation of the wildlife would be degraded.

Further wildlife laws such as the Pittman-Robertson act of 1937 and the Migratory Bird Treaty Act funneled money to states for wildlife conservation, restoration of habitat, and wildlife management research. The Pittman-Robertson act was amended in 1970 to include money for hunter education programs.



Hunting Ethics

"Ethical behavior is doing the right thing when no one else is watching - even when doing the wrong thing is legal."

— Aldo Leopold "The Father of Wildlife Management"

Master Hunters are held to the highest ethical standards. Before you are certified as a Master Hunter you will have to sign and abide by the Master Hunter Code of Ethics. The Master Hunter Code of Ethics reads:

As a Master Hunter, I am a steward of the future of hunting. I pledge to act in accordance with the highest ethical standards. I will display proper respect for game, landowners, other hunters, the public, and all fish and wildlife laws. I pledge to be a conscientious, committed hunter who cares about the future of hunting. I will assume a leadership role among my peers and will do so by exhibiting exemplary conduct in the field. As a Master Hunter, I shall play a key role in improving relationships with all landowners, thus ensuring continued hunter access to private and public lands. I pledge to continue to expand my knowledge of wildlife and natural resource management practices and understand the role I play in these practices. I pledge to be a "Steward of the hunt."

A principal distinction between wildlife laws and hunter ethics is that ethics are unwritten rules that govern individual hunter behavior. Teaching ethics to anyone about any subject is very difficult because everyone's ethical standards are a product of their environment, upbringing, and previous teachings. All hunters should be hunting ethically. Being ethical hunters will improve public perceptions of hunting and will benefit the sport. All Master Hunters will be held to the highest ethical standard as a steward of the hunt.

Ethical hunters make sure that their hunting equipment is sighted in correctly, working properly, and can be used by the hunter effectively. Practice makes perfect when shooting, so ethical hunters should shoot often and from a variety of positions and ranges. Also, the hunter should ensure that the equipment that they are using is sufficient to humanely and effectively harvest their targeted game animal. Safety lends itself to ethics as well. When hunting ethically hunters should ask themselves questions such as:

- Is the backstop going to be effective enough?
- Is the distance too great for my skill level?
- Are there homes nearby?
- Is the shot worth the implied risk?

Hunters' relationships with landowners are integral to keeping our hunting heritage. According to the Washington State Recreation and Conservation Office's public lands inventory,

19,805,117 acres of Washington is publicly owned. This is roughly 40 percent of the state. The other roughly 60 percent is privately owned. Hunting on private land is a privilege, not a right.

To create good landowner relations, ethical hunters should ask permission well in advance of their hunting activity. Hunters should also ensure that they leave the land as they found it and respect the landowner's wishes. Hunters might also express their appreciation by volunteering to help with projects or tasks around their property that they are trying to complete. Landowners will generally remember those that did not act in an ethical manner. That one interaction may taint their views on all hunters.

Experts have noted that as hunters gain more experience hunting, their ethics may evolve. Over the hunter's lifetime, they generally go through five identified stages, but some hunters never progress out of certain stages. These stages may have different names in different literature, but the general ideas and motivations are similar throughout.

- 1. **Shooter Stage** This stage is when shooting at game is the primary driving force for the hunter.
- 2. **Limiting-Out Stage** This stage is when a hunter wants to shoot limits every time they go afield.
- 3. **Trophy Stage** This stage is when the hunter has become selective and is looking to harvest a particular class of animal.
- 4. **Technique Stage** This stage is more about the "how" than the "what." For example, the hunter prefers to hunt archery versus modern firearms because it is more of a challenge to the hunter.
- 5. **Sportsman Stage** This stage is when the hunter is pleased when he/she gets to go hunting. They don't have to prove themselves a successful hunter, and generally they will hunt to enjoy the experience.

Ethical hunters also honor game animals. They should know how to properly take care of the game harvested and use all of the parts of the animal. Also, when the opportunity to shoot presents itself, ethical hunters never shoot more than they will be willing to use. A general rule of thumb for many is, "If I am not going to utilize it, I won't harvest it."

Some behaviors that are considered unethical in regards to hunting:

- Shooting at animals outside the range that you are comfortable shooting or outside your hunting equipment's effective range.
- Shooting birds while they are on the land, water, roosting, or foliage (except grouse)
- Using hunting equipment that is not properly sighted in
- Shooting a female with young
- Cornering game animals to not allow them an avenue of escape

Master Hunters should strive to be ethical hunters and instill these ethics to others they may influence.

Situational Ethics

Below are some scenarios that you may encounter while hunting. After each scenario, ask yourself what you believe is both legal and ethical. The information from WDFW is located below the question.

- 1. You are hunting pheasants in eastern Washington. When walking down a path you see a rooster standing in the middle of the trail. Should you harvest the pheasant while he is standing in the trail?
 - a. Pheasants are legal to hunt in Washington. There is no regulation on when and where you can shoot birds. However, most hunters and non-hunters who are supportive of hunting feel that shooting birds that are not flying is not ethical. Try to move in towards the pheasant and stop, waiting for 10-15 seconds. Birds may jump when given the pause in movement.
- 2. Hunting antierless deer, you see a doe with a fawn that is eating grass along with the doe. Do you harvest the doe?
 - a. Being that antierless deer is open and the doe is a legal animal you could take the doe. However, giving the fawn more time with the doe will give it a better chance of survival. If the fawn more closely resembles a yearling deer, the shot would be acceptable.
- 3. While hunting elk in a clear cut, you find a bugling bull won't let you inside of 500 yards. You have practiced shooting to 300 yards. Should you take the shot?
 - a. Knowing your shooting ability and having confidence in the shot is paramount. If you are unsure of the shot, you should not shoot. Knowing your rifle and your shooting abilities will help you make the decision to shoot or not. You will also want to make sure that your ammunition has the needed energy to expend at 500 yards to make a clean, humane kill.
- 4. While duck hunting on a backwater slough, you see a deer swimming across the water. You have a deer tag, its deer season, and you have a nontoxic deer slug. Should you harvest the deer while it is swimming?
 - a. This is not just unethical, it is unsafe. Shooting at the water is a safety hazard because the slug may ricochet in an unsafe fashion. Also this is not generally accepted as fair chase.
- 5. Sitting over decoys, you have some ducks land in your spread while you are pouring a cup of coffee. Seeing the ducks swimming in the spread, do you shoot them on the water?
 - a. Same situation as item 1. There is no law or rule preventing you from shooting birds on the water, but it is not sporting. To make sure that the birds have a sporting chance you could stand up and make some noise to make the ducks jump.
- 6. You see a bear feeding in an alpine meadow. There are some smaller bears that look like cubs also in the meadow. You cannot tell if the bear is a boar or a sow. Do you harvest the bear?
 - a. Hunters are urged to not shoot a sow with a cub(s), but the law does not prevent it. Cubs between 30-50 pounds need the sow's assistance with feeding and

- learning how to survive. Wait for a while to see if the bear can be identified as a boar or sow. If you wait and the sow shows up, you could harvest the bear.
- 7. You have a multi-season elk tag and are hunting the muzzleloader season with a friend. It is open to 3-point minimum elk. Your buddy accidently shoots a cow. Archery season is concurrently open and antierless is legal for archers. Do you tag the cow for your friend?
 - a. Not only is this unethical, it is illegal. According to WAC 220-413-020, only the person who harvested the animal can tag the animal. In this situation, you should call the state patrol and let them know that you need to have WDFW Police dispatched to your location.
- 8. Baiting is legal for all big game except bear. Do you decide to use commercially available bait for deer?
 - a. Some hunters feel that baiting deer is unethical. However, in many states this is the standard way to hunt. It is up to the individual hunter to decide what to use and how to use it.
- 9. You are tracking a mule deer buck. Finally, you can see the body of the deer, but only a small window of his body is visible. You cannot see his head, legs, or tail. Do you take the shot?
 - a. Since you are not sure of the direction of the animal or if it is even the same deer, don't shoot. Wait until a better shot presents itself or you see the animal and determine the location of the vital area. You could also pull back and move vantage points to see if you can get an ethical shot.
- 10. A buck deer is feeding on a piece of private land you have permission to hunt. However, he is near the fence line of a neighboring property where you do not have permission. Do you harvest this deer?
 - a. Since the deer is close to the property line and you are unsure if the neighboring property owner is ok with hunting, ethically you should wait until the deer gets further onto the property on which you have permission to hunt.
- 11. You have an antierless elk special permit and a landowner gives you permission to harvest a cow on his property. You pick out a good looking cow and fire. Upon firing, the herd moves about 50 yards to the left and you lose sight of the cow you were shooting at, and you are fairly sure you missed the cow. Do you shoot again?
 - a. Since you took a shot at an animal and may have hit it, you need to follow up the shot. Hunters can only harvest one elk with their general season tag. Following up the shot will ensure whether you did or did not hit the animal and will make sure you don't accidently harvest two animals.
- 12. You are hunting elk during modern firearm season and have a bear tag as well. However, you have never field dressed, skinned, and processed a bear before. You see a bear in a clearing and can harvest it. Should you harvest it?
 - a. This is a difficult ethical situation. Big game skinning and field dressing is fairly standard across Washington's big game, so an elk hunter should be able to properly care for a bear. However, it may be a good idea to watch some instructional videos online prior to hunting for bear to ensure you know how to

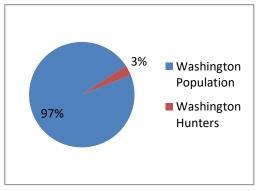
properly care for the animal, especially if you are planning to have the bear skin turned into a rug or mount.

- 13. Seeing a white-tailed buck in a farmer's field, you find the landowner and ask for permission to hunt. They give permission and you are allowed onto their property. Walking up a two track road, you notice that the farmer's gate is open and cattle are slowly moving into another pasture. Do you close the gate to keep the cattle in the current pasture?
 - a. When you ask for permission from the landowner to hunt their property, it is generally a good idea to discuss gates and other possible impacts to your hunt and their property. If you didn't talk to the landowner about gates and what to do with them, make sure to leave them as you found them.
- 14. While looking for pheasant hunting areas, you spot a few roosters flying into a cut corn field. You find the landowner and are given permission to hunt. The landowner gives you permission to hunt pheasants and buck deer on their property. You head up the draw and find a doe in the field. You have an antlerless deer permit for this GMU as well as buck shot. Do you harvest the doe?
 - a. The landowner did not expressly say you could harvest antlerless deer, so the opportunity should be passed. You could possibly contact the landowner to ask for permission to harvest the doe if you went back to ask permission or called them if you had their phone number.
- 15. You are getting a late start to the day of waterfowl hunting. You start moving to your favorite honey hole when you notice that there is another hunter near where you want to set up. Do you go set up?
 - a. If possible, the late hunter should contact the other hunter to determine if the set hunter thinks the late hunters set up will impact their hunt. Hunters should always show courtesy to other hunters by not impacting their hunt.

Hunting Community

Hunters can be considered a community since a community is a social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage. The hunting community is a minority in the US population. Statistics from the 2011 national survey of fishing, hunting, and wildlife associated activities indicate that the US population is about 311,700,000. Hunters who were 16 years of age or older accounted for only 13,700,000, which is 4 percent of the total US population.

Washington is the smallest state in area of the 11 western states, but its population is second only to California. The percentage of hunters in Washington is very similar to the national population of hunters. In the 2011 survey, Washington's population was about 6,822,000, and its hunter numbers were 219,000. The hunting population is only 3 percent of the state population.



Within the hunting community there are many different user groups who are sometimes at odds with each other, such as traditional archery hunters and compound archery hunters. They share the same passion about archery hunting, but traditional archers may not want to allow more modern equipment such as mechanical broadheads when compound archers might want to allow their use. This issue is a real life example that happened in 2015.

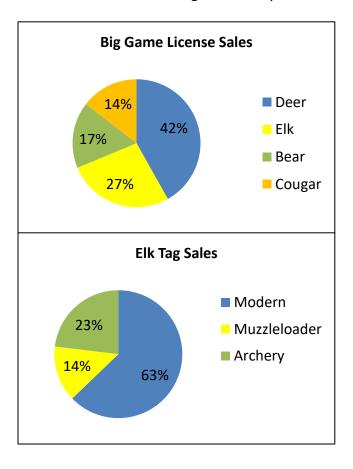
Below is information on the license purchase statistics from the 2015 license year for big game, small game, and waterfowl purchases. The hunters who bought a particular license or tag may have also purchased another license or tag detailed in another section. This section is meant to show the different user groups that are easily identifiable within the hunting community.

2015 Big Game Hunting Statistics

- 397,357 Big game tags purchased
- 155,680 Deer
- 99,914 Elk
- 62,263 Bear
- 54,019 Cougar

2015 Elk Hunting Statistics

- 97,680 Elk tags purchased
- 61,370 Modern Firearms
- 13,780 Muzzleloader
- 22,530 Archery

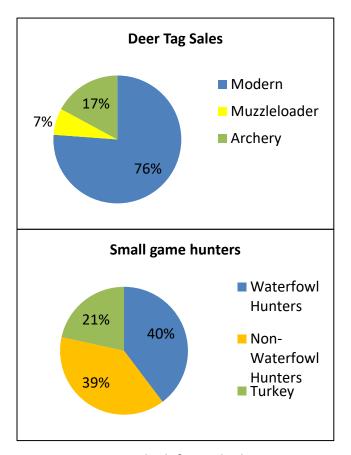


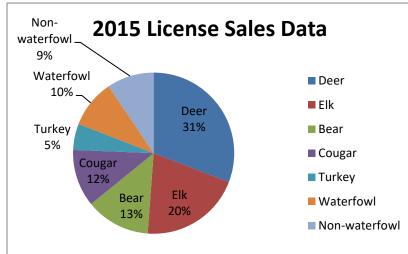
2015 Deer Hunting Statistics

- 155,680 Deer tags purchased
- 112,893 Modern Firearms
- 9,942 Muzzleloader
- 25,378 Archery

2015 Small Game Hunting Statistics

- 91,735 Small game hunters
- 46,445 Hunt waterfowl
- 45,290 Don't hunt waterfowl
- 25,242 Hunt turkey





To the left are the hunting license sales data rolled into one chart. It is clear to see that the license purchases are diverse, with big game making up over 75 percent of sales. Remember that these numbers are tags or permits purchased and individual license purchasers can be represented in more than one of the categories.

Since Washington has such a

diverse hunting population, areas of interest and priorities may not always align. However, if that happens, it can be beneficial to consider things from the viewpoint of the other hunters with an open mind. Doing so may open up more hunting opportunities and create new appreciation for hunting. Having this diversity keeps the hunting community resilient, and gives hunters a better understanding of how new regulations might affect other hunters and non-hunters alike.

If new regulations are needed, hunters should provide constructive comments on the proposed rule change(s) to the WDFW commission, State Representatives, and State Senators at appropriate times. For example, do not provide input on fishing seasons during a hunting discussion.

Regardless of chosen game, equipment, or motivation for hunting, all hunters need to stand together as a community to promote our hunting heritage. It is vital that hunters respect other hunters' choices on how they want to hunt.

How to Talk About Hunting

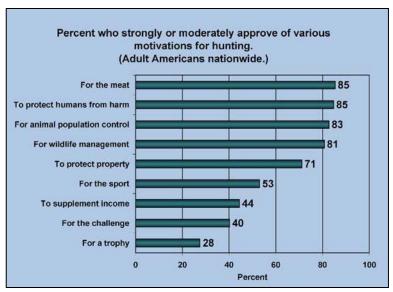
Millions of people throughout the United States enjoy hunting experiences every year. Hunters all have their own reasons for hunting, and it's important to communicate those reasons effectively when speaking with non-hunters. While harvesting an animal is certainly a part of our hunting heritage, for many hunters it is not the sole purpose. Talking about the other aspects of hunting with non-hunters can improve how it is perceived by other communities.

For example, hunting is widely used as a wildlife management tool to improve the health of wildlife populations and prevent overcrowding. Even flourishing habitats can only accommodate a certain number of animals without damaging the habitat. Animals outside that carrying capacity fall victim to starvation, disease, or other natural factors.

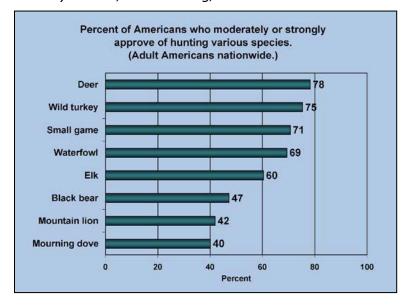
Game animals have lean meat that is free of the additives that are in store-bought meats. The meat is also more protein rich and has fewer calories than commercially available meat. Animals harvested while hunting are truly free range and totally organic.

Many hunters also participate for the adventures that they have while surrounded by nature. For them, harvesting an animal is second to the experience of being out in the woods, listening to the wildlife around them, and getting away from the bustle of everyday life. Through the purchase of firearms, ammunition, hunting supplies, and licenses and tags, they are contributing to the conservation of not only game animals but other species as well. The Pittman-Robertson act enacted an 11 percent excise tax on sporting arms, archery equipment, and ammunition, as well as a 10 percent excise tax on handguns, that is portioned out to each state for use in wildlife management and hunter education.

Promoting the outdoor recreation and land conservation aspects of hunting is encouraged when speaking with the non-hunting public. The majority of the population will respond positively to enthusiasm and love for the outdoors, as it is a passion shared by people across all walks of life. Communicating effectively is paramount when talking about hunting to the general population. Being able to clearly express the main points of the intended message makes it easier for the audience to absorb and understand the issue.



Graphs: Responsive Management 2010 "The Sportsman's Voice: Hunting and Fishing in America. Venture Publishing, Inc. Responsive Management/ National Shooting Sports Foundation. 2007 The Future of Hunting and Shooting Sports: Phase III Telephone Survey Results, Harrisonburg, VA



Public Support of Hunting

The public is generally supportive of hunting. In a survey conducted by Responsive Management, 88 percent of Washington residents approved of hunting. Only 12 percent did not approve, or had no opinion. The approval rating was highest when the motivation was for meat or to protect human safety. The lowest approval for hunting was for a trophy. For the challenge was also not a popular reason.

During a 2010 survey, Responsive Management found that the approval of hunting was different based on the species that was hunted.

What generates the highest public support for hunting is connecting hunting and hunters to broader conservation concerns impacting wildlife and habitat. Here are some facts about hunters and economics in Washington according to

huntingworksforwa.com:

- \$370 million spent annually by hunters.
- 219,000 people hunt in Washington each year.
- Of those hunters, 19,000 are from out of state.
- Washington hunters spend over \$163 million on trip-related expenditures.
- Hunters in Washington spend over \$156 million on hunting equipment.
- Each hunter spends an average of \$1,600 a year in Washington.
- Hunter spending translates to nearly \$211 million in salaries and wages.
- Hunting in Washington supports 5,600 Washington jobs.
- Hunters pay nearly \$40 million in state and local taxes.

Keeping these positive aspects of hunting in mind when speaking with non-hunters is a good way to promote the sport and ensure the public remains informed and supportive.

Words Matter

Remember that words and actions matter when talking to non-hunters. Staying away from words that might have a negative image is vital. Hunters should train themselves to use words that are less negative when communicating with non-hunters. Some examples are identified to the right.

Negative	Accepted
Kill	Harvest
Gut	Field Dress
Butcher	Process

Essentially, these terms mean the same thing. However, the perception of each word is different. Using the accepted terms may make a non-hunter more accepting of hunting, and using the negative term might turn them against hunting. It is unlikely that one conversation about hunting will negatively impact a non-hunter, but it is still courteous to act in a respectful way.

Since actions speak louder than words, it is important to consider how actions might be interpreted by the non-hunting public. After hunting and successfully harvesting a deer, it would be considered poor etiquette as a hunter, conservationist, and member of the community to strap the carcass to the hood of the truck and drive it through town. The sight of a dead animal could be interpreted poorly by others, not to mention this display can negatively affect the quality of the meat. Moreover, such action is seen by most in the general public as being disrespectful to the animal.

Before posting on social media sites like Twitter, Facebook, or Snapchat, hunters should think about the content of the post. Will the post offend non-hunters that may be friends or follow the hunter? Did the post convey the effort, intent, and commitment that go into a successful harvest?

Policing our own ranks will help shift the negative into a positive. Some messaging that is publicly available can also be negative exposure to the non-hunting public. Common sayings such as, "If it's brown, it's down" or "If it flies, it dies" or "Happiness is a warm gut pile" can make non-hunters feel that hunters are a bunch of ignorant, blood thirsty killers instead of the conservation advocates and avid outdoors-persons we are.

Giving Back

Master Hunters should be motivated to give back to our hunting heritage. This may be by taking youth on their first hunting trip, teaching in a hunter education course, or helping on department projects benefiting wildlife. To become a Master Hunter, an applicant must complete at least 20 hours of department approved wildlife conservation work during their application period.

An easy way to find volunteer opportunities that qualify for wildlife conservation hours is to contact the WDFW volunteer coordinator for the applicant's county. Also, WDFW sends out a Master Hunter newsletter to all applicants and Master Hunters every two months with information on projects that are recruiting volunteers. Master Hunters and Master Hunter applicants can then contact the project leads and volunteer for those projects. Applicants are encouraged to complete the volunteer requirements early in the year since the later in the year it is, the closer hunting season gets.



First Hunt Foundation

WDFW is partnering with the First Hunt Foundation to get mentors signed up to take first time hunters on their first hunt. These hunters can be any age. Each different species is another opportunity for a hunter who doesn't have experience to go on a mentored hunt. The mentors will be a great help to the recruitment, retention, and re-engagement of hunters in Washington State because it will help train new hunters on how to be safe, ethical, legal, and successful when hunting. You can find more information online at https://www.firsthuntfoundation.org/.

CERVIS

Another good place to search for volunteer projects is the WDFW volunteer opportunities page and the CERVIS system. This system allows volunteers to register as a WDFW volunteer and sign up for projects electronically (people need to make sure they are registered as a volunteer with WDFW.) Also note that WDFW provides medical-only industrial insurance for registered volunteers, which covers the medical costs for injuries and illnesses incurred while completing assigned volunteer tasks as directed. Applicants can sign up online at WDFW's volunteer webpage (https://wdfw.wa.gov/get-involved/volunteer) or by using the paper form.

Damage Management Removals

Wildlife conflict is an issue that the department deals with year round. The department has a conflict section to help address damage to private property by deer, elk, turkey, and moose. There is also the Wildlife Control Operator Program that certifies trappers to be able to remove problem small game with traps and charge a fee. To help with big game conflicts, the Fish and Wildlife Commission created the Master Hunter Permit Program. The hunters enrolled in the program can be used to remove wildlife causing damage or can be used to haze wildlife away from properties being damaged. The Wildlife Conflict Specialists' (WCS) goals are to minimize

damage caused by wildlife by adding hunting pressure to move the animals causing damage to their historic range and habitat.

Master Hunters are but one tool in the toolbox of the WCS. The WCS have several different options for lethal removal of wildlife causing damage. These removal options are the Landowner Hunting Permit, Damage Prevention Permit, Kill Permits, and Master Hunter Special Permits.

Landowner Hunting Permit (LHP)

The LHP program has been implemented by the Fish and Wildlife Commission (WAC 220-412-100). The program is designed to increase hunter access to private lands and to help landowners address long-standing deer/elk damage issues. LHPs can include permits issued to landowners that allow hunting without a landowner access fee; that allow hunting only if a landowner access fee is paid; or a combination of both. Permit levels, types, and seasons are allocated and approved in advance by the Commission based upon input from the LHP contractors/participants. The approved hunting seasons and regulations may, in some cases, be different than those approved for the hunting public during general seasons.

Damage Prevention Permits (DPPs)

The Fish and Wildlife Commission also has approved DPPs (WAC 220-440-200). DPPs provide landowners with a management tool that utilizes hunters to address property damage. Once issued to a landowner by the commission, a DPP allows the properly licensed landowner to remove damage-causing deer/elk/turkey, or it allows another licensed hunter to be selected by the landowner to take the animal(s). Landowners and/or hunters may keep harvested wildlife, and landowners may charge and keep access fees in lieu of submitting damage claims to WDFW. The timing of a DPP harvest is not dictated by general hunting seasons, but by the occurrence of depredation.

Kill Permits

Kill permits are authorized by WAC 220-440-060 under the authority of the WDFW director. A kill permit may be issued to a landowner and immediate family that have documented deer and elk damage. An animal killed under this authority may be retained by the landowner if authorized by the director. No licenses or tags are required. Landowners may be allowed to retain the animal in exchange for agreeing to not submit damage claims. The timing of a kill permit is not dictated by general hunting seasons, but by the occurrence of depredation.

Master Hunter Special Permits

Master Hunters have the ability to put in for special permits during the special permit submission timeframe (generally mid-April to mid-May) to help address wildlife causing damage. The Master Hunters pay for an application and submit their hunt choices just like other special permits. If the special hunt has a hunt note of "HC," it is a hunt coordinator hunt and the successful applicants are not guaranteed a chance to participate in the damage removal since damage caused by wildlife varies from year to year and location to location. Since

the damage can fluctuate so much, the department creates a large number of permits to ensure they can manage the damage. When the WCS verifies there is damage and that a Master Hunter would be the best way to control the damage issue, the WCS can deploy a Master Hunter to address the damage. This process is regulated by the department's Hunt Coordinator Guidelines. These can be found on the Master Hunter Permit Program Policies and Procedures page (https://wdfw.wa.gov/sites/default/files/2019-06/2018 hunt coordinator guidelines.pdf).

Expectations of Master Hunters on Damage Removals

Master Hunters are expected to:

- Represent themselves, our hunting heritage, and the MHPP with the utmost professionalism.
- Follow all state and local laws pertaining to hunting and use of firearms.
 - Additionally, Master Hunters are required to follow all conditions set forth by the WCS, Hunt Coordinator (HC), or landowner.
- Consider safety to be the number one priority and fully understand and agree to strictly adhere to any mandated shooting lanes or other restrictions indicated by the WCS, HC, or landowner.
 - Safety takes priority over the harvesting of any animal.
- Refrain from contacting department personnel regarding the permit list and the Master Hunter's status on the list. These calls require excessive staff time and decrease the time WCS could be mitigating or preventing wildlife conflicts.
- Be at the damage management property within the time period communicated by the WCS or HC.
- Provide reasonable hunting effort, possibly over several days, and possibly under difficult conditions.
 - Vehicle access to the property may be severely restricted or prohibited.
- Work with the WCS and/or HC (as directed by the department). This includes timely reporting of effort and harvest.
- Be EXTREMELY proficient in the use of the hunting equipment required.
 - If the Master Hunter does not feel that he/she is proficient in the hunting equipment required, he/she should pass on the activity. The hunter's name will remain on the list for future damage management opportunities.
- Have their hunting equipment sighted in for hunting prior to arrival at the damage management property location.
- Be knowledgeable of the anatomy of the animal to be lethally removed and the correct shot placement for a quick and humane harvest.
- Be able to field dress any harvested animal effectively.

Master Hunters should expect:

- The WCS and/or HC to treat all Master Hunters fairly.
- The department to follow the Hunt Coordinator Guidelines when deploying Master Hunters.

- To be called only as needed. Not every Master Hunter who is drawn may be able to participate in damage management activities.
 - These damage management activities are used to minimize wildlife damage to private lands, and damage levels fluctuate each year.
 - Master Hunters not given an opportunity to hunt will get their Master Hunter Special Permit Points re-instated.
- The Master Hunter may be removed from the damage property and the next available
 Master Hunter used if the WCS or HC deem the Master Hunter:
 - Has inadequate knowledge required for the damage management activity
 - o Is hunting improperly, unlawfully, unethically, or in an unsafe manner.
 - Is not applying enough hunting pressure as instructed by the WCS, HC, or landowner.
 - Is not using the directed technique(s) or abiding by any instructions given by the WCS, HC, or landowner.
- Local Master Hunters who meet the necessary requirements for the removal and who
 can get to the property quickly and address the damage may be contacted first in
 emergent issues.
 - Emergent issues exist when there is ongoing game damage and the Master Hunter is required in fewer than 12 hours. If the Master Hunter does not feel he/she is proficient in the hunting equipment required, he/she should pass on the activity. The hunter's name will remain on the list future opportunities.
- To be flexible and respectful to landowner restrictions and expectations.

Master Hunter General Seasons

The department has created Master Hunter general elk hunting seasons in areas where elk damage is highly likely and chronic. The primary objective of the Master Hunter general season hunts is the removal of targeted game species. A secondary objective includes reasonable incentives to encourage safe, skilled, and ethical hunters to join and remain in the program. These opportunities are based on justifiable, biologically sound data with specific hunt objectives such as removal of game species causing property damage.

These hunts should target the removal of wildlife having one or more of the following characteristics:

- Are prone to cause property damage,
- Are a residential nuisance,
- Pose a threat to public safety,
- Have physical limitations which could hinder wildlife health or survival,
- May be a threat to other wildlife,
- The removal of wildlife that meet the previously noted criteria, regardless of sex as appropriate.

The most notable general season for Master Hunters is Elk Area 3911. This season was created to help address damage to agricultural lands by elk. Most, if not all, of Elk Area 3911 is private

property and can be somewhat difficult to access and hunt. Assisting landowners in 3911 with projects identified by the Region 3 Volunteer Coordinator, may increase your odds of being able to secure access.

Because Elk Area 3911 is the most visible and well known Master Hunter general season, the public watches Master Hunters closely during the season. Landowners in Elk Area 3911 have experienced issues with Master Hunters expecting access to private land, trespassing to hunt or retrieve down elk, littering, leaving gates not as found, and other issues. The public watches and judges all Master Hunters by the actions they see. Master Hunters who participate in the Elk Area 3911 general season hunt need to follow the highest safe, legal, and ethical standards.

There are also general Master Hunter seasons for GMU 127, GMU 130, Elk Area 3912, GMU 371, and Elk Area 6064.

Deer Species

Washington is home to four subspecies of deer. Of those four, hunters are able to hunt three: black-tailed, white-tailed, and mule deer. The fourth species, the Columbian white-tailed deer, is currently on the state and federal endangered species list.



Photo by Antony Sirgedas

Black-tailed deer

Successful hunting for black-tailed deer is primarily a function of the effort, focus, and energy that hunters put into the hunt. Black-tailed deer thrive in heavily vegetated habitats and are often nocturnal in nature. This means that successful black-tailed deer hunters must be in position early in the morning and carefully hunt near sources of food and in secure cover.

Black-tailed deer hunting is often best near the end of the general season, as conditions in the heavily vegetated westside improve for stalking and moving

through the woods quietly. The best opportunity often occurs during the late buck hunt, when favorable stalking and weather conditions combine with the breeding season or rut. The most successful hunters study the area carefully and move very slowly, constantly searching for deer. Bucks travel more during the rut, when they cover large amounts of territory searching for does in estrus. This makes bucks more vulnerable as they spend less time hiding and are sometimes found in "open" habitats, like clear cuts and meadows.

To the right is a map of where you may expect to see these deer.

• Species description

- Black-tailed deer occur from the crest of the Cascades west to the Washington coast, preferring brushy, logged lands and coniferous forests.
- The tail is broader and the backside of the tail is covered with dark brown hair that grades to black near the tip.
- Adult black-tailed deer bucks weigh 140 to 200 pounds and adult does weigh 90 to 130 pounds.
- o The antlers have a main beam that forks in adult bucks.
- Dark colored belly
- Grey to brown face

Shelter and range needs

- Black-tailed deer normally reside within a one half to three square-mile area. In mountainous locations, they migrate to lower elevations for the winter.
- Deer numbers differ among habitat types and the highest deer densities are associated with 5-7 year old clear cuts. These young tree stands provide large amounts of both cover and food.
- Those areas with cover are more likely to contain deer for the majority of the day.

Hunting techniques

- The traditional approaches to hunting black-tailed deer include stand hunting or still-hunting in high use areas (clear cuts, highly traveled trails, funnels, bedding areas, etc.) until the deer show up.
 - Sitting in a blind or tree stand can be a very effective way to hunt blacktailed deer

Hunt the edges

- Watch edges of tree lines and fields. Deer like to hug these areas for quick escapes and movement into cover.
- Spot and stalk can work when hunting large clear cuts. This technique is generally not an efficient way to hunt black-tailed deer in areas with very thick undergrowth and brush.



Photo by Larry Smith

White-tailed deer

White-tailed deer are generally found in the eastern third of Washington. Look for white-tailed deer along stream drainages and in other areas with riparian vegetation or thick cover. White-tailed deer actively use edge habitats where denser cover abruptly transitions into more open meadows. Many hunters will wait patiently at a stand along an obvious game trail or the forest edge, often employing the use of a blind or tree stand. The majority of hunting success is near or adjacent to agricultural fields or recent forest timber harvest areas where deer are present and much more visible than in adjacent habitats. However, deer typically use these more open areas at night, dawn, and dusk,

especially if they have been disturbed by human presence. Therefore, it is advantageous for hunters to seek out areas some distance away from these openings, where there is more cover available, since the deer are spending more time there. If a hunter is seeing large amounts of

deer sign in an area, then odds are those deer are not far away. White-tailed deer densities are highest along the valleys and foothill benches bordering valleys in the farm-forest mosaic. These areas are highly productive both in crops and deer production.

To the right is a map of the white-tailed deer's distribution in Washington.



- Species description
 - White-tailed deer coats are often reddish tan in summer and brownish gray in winter. They get their name from their broad, 10 to 11 inch long tail. When alarmed, white-tailed deer raise their tail, displaying the white underside.
 - Adult white-tailed bucks weigh 150 to 200 pounds and adult does weigh 110 to 140 pounds.
 - Antlers have one main beam with tines extending vertically in most cases.
 - White facial markings
 - Light colored belly
- Shelter and range needs

- White-tailed deer are found across a wide variety of landscapes in eastern
 Washington, from low land riparian areas along water courses to high elevations in the mountains.
- The highest densities are associated with agricultural lands at lower elevations.
 White-tailed deer are present near populated areas.
- White-tailed deer home ranges vary considerably in size in eastern Washington.
 Some annual home ranges are relatively small (three square miles) or quite large in seasonal migratory white-tailed deer populations.

Hunting techniques

- The traditional approaches to hunting white-tailed deer include stand hunting or still hunting in high use areas (e.g., clear cuts, highly traveled trails, funnels, and bedding areas)
 - Sitting in a blind or tree stand is a very effective way to hunt white-tailed deer
- Rattle and grunt calls to simulate two bucks fighting over a doe is more common with mid-western and eastern white-tailed states, but can be effective in Washington State as well, especially in the days leading up to the rut (deer breeding season) in mid-November.
- Hunt the edges
 - Watch edges of tree lines and fields. Deer like to hug these areas for quick escapes and movement into cover.
 - Spot and stalk can be an efficient way to hunt white-tailed deer where the habitat is more open.



Photo by Susan Jensen

Mule deer

Mule deer are present across most of eastern Washington. Mule deer populations in eastern Washington exhibit a variety of seasonal movement patterns, with migratory herds moving up to 50 straight line miles between summer and winter ranges to resident animals with annual home ranges similar in size to resident white-tailed deer populations. Migratory mule deer are often at high elevations in remote locations as long as succulent vegetation is available. Although mule deer will use a variety of habitat types, they will often forage well into fairly open environments, particularly at dawn and dusk. As a result, they can often be glassed and stalked from considerable

distance. A typical hillside of mule deer habitat in the Cascades over the growing season and through the fall will change from bright green in the spring and summer to light green or yellow, to orange, to red, to brown, then to bare branches. While we see changes in color, mule deer are perceiving changes in forage quality. The summer forage that supports deer and gives them the opportunity to produce young and grow antlers does not retain its high quality all year. As it changes, so do the habitats that deer occupy. Even large expanses of sagebrush can

give deer the security they need. In the broken coulee country, topography becomes security and riparian vegetation provides food resources. Deer in these areas often become experts at living in small, secure habitat pockets where they meet their needs and avoid hunters.

Hunters can expect to find mule deer in the counties indicated to the right.



• Species description

- During the summer, mule deer coats are often reddish-tan to light brown. During winter, they are a salt-and-pepper gray.
- They have large, dark-edged ears, from whence they derive their name.
- The seven to eight inch ropelike tail of a mule deer is white, except for a black tip.
- Adult mule deer bucks weigh up to 250 pounds and adult does weigh 110 to 200 pounds.
- The antlers have a main beam that forks
- Face is greyish in color
- Darker colored belly

Shelter and range needs

- They occur in eastern Washington at all elevations.
- Mule deer generally move long distances during spring and fall migrations to avoid mountain snow. Mule deer summering in the Cascades migrate as far as 50 miles to reach adequate winter range.

Hunting techniques

- The classical western method of hunting mule deer is called spot and stalk. Here
 the hunter uses good optics, binoculars, and spotting scopes to scan from ridge
 tops and other vantage points to find the mule deer, pick out suitable bucks, and
 then stalk them to within shooting distance. Ordinarily the stalk entails a
 strategic hike and cautious sneak action.
- Some mule deer hunters employ stand or still hunting techniques
- Hunt the edges
 - Watch edges of tree lines and fields. Deer like to hug these areas for quick escapes and movement into cover.

Photo by Joe Higbee

The Columbian white-tailed deer is a federally and state listed endangered species and cannot be hunted, so is not discussed in depth in this booklet. To learn more about the Columbian white-tailed deer, see the Washington Department of Fish and Wildlife annual report at

http://wdfw.wa.gov/conservation/endangered/species/columbian white-tailed deer.pdf.

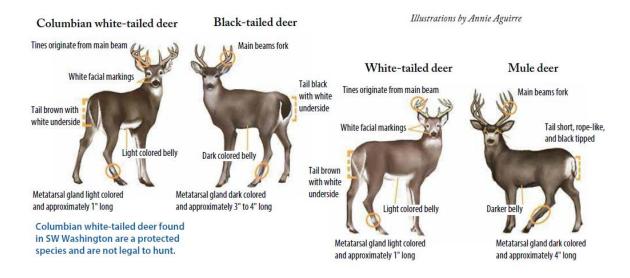
Columbian white-tailed deer

The Columbian white-tailed deer shares portions of its range with the black-tailed deer in western Washington. When hunting in those areas, be sure of your target. To the right is a map of the Columbian white-tailed deer range. In the next section, the differences between the black-tailed deer and Columbian white-tailed deer are indicated.



Deer identification tool

Below is a graphic depicting each of Washington's deer species. This should help hunters to quickly identify deer. The tails will help identify the species of deer when they are a doe or a two-point buck. Make sure to clearly identify if a deer is legal before harvesting.



General Deer Information

Deer are creatures of habit, so knowledge of deer habits and movement patterns are valuable to hunters in finding deer during different times of the day and season. Deer are most active during the early morning and late afternoon/evening.

Food and Feeding Habits

Deer tend to feed before dawn, and if undisturbed, continue until several hours after sunrise. After feeding, deer will bed down for most of the middle hours of the day. However, it is common for bedded deer to get up and feed for 30 to 60 minutes around noon before bedding down again. Deer will return to feeding late in the afternoon and continue until after sunset.

Deer eat a wide variety of plants, ranging from newly sprouted grasses and forbs in the spring to fir needles during the winter. In general, deer tend to be browsers, eating the growing tips of trees and shrubs. In late winter and early spring, deer eat grass, clover, and other herbaceous plants. Deer also eat fruit, nuts, acorns, fungi, lichens, and farm and garden crops if available.

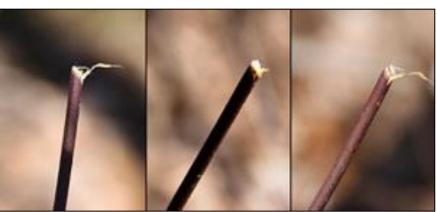
What foods a deer will prefer depends greatly on the species of deer and the habitat where they live (see the table on page 42 for species-specific food preferences). Look for areas where



the trees and other plants seem to have a line of missing limbs or leaves from the ground to about deer height. This may mean that deer are using this area as a feeding area. If you have a good vantage point, this may be a spot to try during the season.

Left: A browse line Photo by WDFW

Examples of browsed bushes.
Photo by WDFW



Food plants used by Pacific Northwest Deer		
Mule Deer	Black-tailed Deer	White-tailed Deer
Trees and shrubs		
Serviceberry	Vine maple	Serviceberry
Sagebrush	Red alder	Sagebrush
Deer brush	Serviceberry	Deer brush
Snowbush	Snowbush	Crabapple
Rabbitbrush	Deer brush	Bitter cherry
Red twig dogwood	Hazelnut	Douglas fir
Winterfat	Hawthorn	Bitterbrush
Juniper	Salal	Willow
Mock orange	Douglas fir	Western red cedar
Ninebark	Oak	
Ponderosa pine	Cascara	
Bitter cherry	Blackberry	
Douglas fir	Thimbleberry	
Bitterbrush	Salmonberry	
Golden current	Willow	
Wild rose	Elderberry	
Thimbleberry	Western red cedar	
Willow	Red huckleberry	
Snowberry		
Forbs and Legumes		
Balsamroot	Creeping Oregon grape	Pearly everlasting
Prickly lettuce	Alfalfa	Balsamroot
Twinflower	Burnet	Fireweed
Alfalfa	Dandelion	Cat's ear
Burnet	Clover	Alfalfa
Dandelion		Clover
Clover		Vetch
Trefoil		
Grasses and Others		
Wheatgrass	Wheatgrass	Oats
Oats	Orchard grass	Deer fern
Cheatgrass	Fescue	Bluegrass
Bluegrass	Lichen	Sword fern
Wheat	Mushrooms and other fungi	Wheat
Lichen		Lichen
Mushrooms and other fungi		Mushrooms and other fungi



Photo by WDFW

Tracks

Deer will often have regular routes they use to travel through their home range. These travel corridors may become well-worn trails that look a little like narrow human footpaths. The trails may be clear of low vegetation, but are not bare unless they are in shade or are heavily used by deer and other animals. These trails are also known as game trails. Looking at muddy areas of the trails will help you identify the animals using the trail. Sandy areas generally do not hold tracks well. Dirt areas generally hold a track better than sand but not nearly as well as slightly moist mud.

Deer tracks are easy to identify. In a normal hoof print, the two roughly teardrop-shaped halves

print side by side to form a split heart. When a deer is walking on a slippery surface, such as mud or snow, its hooves are likely to be spread into a V, which helps keep the deer from sliding forward. Deer tracks are one and a half to three and a quarter inches long. The smallest prints belong to fawns and the largest to adult deer. The small dewclaws shown in the drawing may not always register.



Drawing by WDFW

Droppings

Looking for deer droppings is another way of determining if deer are present and using a particular area. Deer droppings vary greatly in size and shape, but are easy to identify. Most of



Photo by WDFW

the year they are deposited in a group of 20 to 30 dark cylindrical pellets with one flat or concave end and one pointed end. Individual pellets are 1/2-3/4 inch long and individual piles are 4 to 6 inches in diameter. When deer are feeding on moist vegetation, the pellets stick together and form clumps. New droppings have a shiny, wet appearance for a few days and then lighten in color as they age. Droppings in eastern Washington tend to turn a chalky white after several days because they dry out faster. Western Washington droppings will stay brown longer because they generally stay wetter. Just because you see droppings does not necessarily mean that there are animals in the area unless the droppings are fresh. However, seeing a lot of droppings indicates animals are using the area frequently as a feeding area or travel corridor away from a feeding area.

Bedding areas

Deer seek areas that provide security from disturbance when bedding. An area of flattened vegetation 3 to 4 feet long and 2 to 3 feet wide indicates where a deer may have bedded down. Deer sleep in dense cover or tall grasses and may return to the same spot over many days. Since deer often travel in small groups, there may be several "deer beds" in the same vicinity. During winter, similarly sized depressions in the snow, often littered with old hairs, characterize bed-sites. If you know about these sites, it can be effective to set up near the site and watch for deer coming back to bed down after feeding.

Rubs

Bucks rub off some of the velvet covering their antlers by rubbing them against young trees and shrubs. These rubbing sites also communicate their presence and breeding readiness to other deer. This communication has several facets: the visual sign left by the buck's rubbing, chemical signals left from glands on the buck's face, and the sound of the buck thrashing branches of the tree on which it is rubbing. Although antlers are bone white when the velvet is first removed, they become stained various shades of brown as plant compounds accumulate through constantly being rubbed by brush and trees. The color results from a chemical reaction of the plant compounds with the air, in a process known as oxidation.



Photo by WDFW

Scrapes

Bucks make scrapes during the pre-rut period by scraping the ground with their hooves near the base of a tree or under lower hanging branches. Bucks commonly urinate on scrapes and rub their orbital glands (located just below their eyes) on any branches that hang over a scrape. Scrapes serve several functions, including marking a buck's territory, providing a signpost of their presence, and advertising a place for does to find bucks during the rut.

General Deer Hunting Techniques

There are four basic hunting techniques used in deer hunting: stand hunting, still hunting, spot and stalk, and driving.

Stand hunting is best described as waiting in ambush, where a hunter gets in position at a place along a trail, feeding site, or other deer use area and waits for a deer to present itself. Ground blinds or tree stands are commonly employed in stand hunting although many stand hunters just lean against a tree or sit on a stump near a likely area or travel corridor.

Still hunting requires the hunter to move very slowly and quietly through deer habitat in hopes of seeing a legal deer before the deer reacts to the hunter's presence. Although all forms of deer hunting are challenging, still hunting is perhaps the most challenging. Successful still

hunters move at a snail's pace, taking three or four steps at a time, and then stopping to look and listen. It is important that the hunter move into or across any prevailing wind so as not to be smelled by a deer.

Spot and stalk hunting is where a hunter surveys areas likely to be used by deer, usually aided by binoculars or a spotting scope. Once a legal deer is spotted, the hunter then sneaks to within range of the deer in hopes of getting a shot. Spot and stalk is commonly used in more open deer habitats where deer can be spotted at a distance. It can also be used when deer have been observed by a hunter and the hunter has not been detected by the deer.

Driving is a combination of stand hunting and still hunting. It requires a group of hunters that are divided into drivers and blockers. The blockers are positioned at locations where deer are likely to move through when the drivers have been detected. The drivers advance toward the blockers through likely deer habitat in hopes of seeing deer or moving deer toward the blockers. This technique is commonly used in the upper mid-west United States when hunting white-tailed deer but can be applied in variant forms to hunting any of the deer found in Washington.

Deer Hemorrhagic Diseases (Bluetongue, Epizootic Hemorrhagic Disease)

Hemorrhagic diseases (Epizootic Hemorrhagic Disease or Bluetongue) are common viral diseases of white-tailed deer, but rarely affect other species. These diseases occur during the driest part of the year when conditions are favorable for the biting Culicoides gnats that transmit them. The gnats are found in wet, muddy areas where deer may congregate during late summer and early fall, especially in unusually warm, dry years.

The spread of these diseases is usually cut short with colder, wetter weather which spreads the deer out and away from gnat-infested areas or by the first hard frost which kills the disease-carrying gnats. The incubation period for these diseases is five to 10 days. Afflicted deer may be observed for a couple of weeks after the first hard frost of fall.

Deer in the early stages of hemorrhagic disease may appear lethargic, disoriented, lame, or unresponsive to the presence of humans. As the disease progresses the deer may salivate excessively or foam at the mouth, have bloody discharge from the nose, lesions or sores on the mouth, and swollen, sometimes blue-tinged tongues. Oftentimes the disease kills the deer so quickly (within a day or two), that they may die in very good body condition. In other cases, they may not die, just become sick and stop eating, resulting in emaciation. Other wildlife, like mule deer, elk, and bighorn sheep could be exposed to the disease but are usually not stricken like white-tailed deer.

Domestic livestock may also be bitten by the disease-carrying gnats. Cattle and sheep are seldom seriously affected by EHD, although sheep can be quite susceptible to Bluetongue.

Humans are not affected by these viruses. However, WDFW recommends hunters avoid shooting and consuming animals that are obviously sick.

Hair Loss Syndrome

"Hair loss syndrome" (HLS) of black-tailed deer was first described in western Washington in 1995. The condition is caused by a heavy infestation with a Eurasian louse of poorly defined taxonomic status in the genus Damalinia (Cervicola) sp. The normal hosts of this louse are European and Asian deer and antelope, which are not seriously affected by the lice.



In contrast, when black-tailed deer become infested, they tend to develop a hypersensitivity (severe allergic) reaction to the lice, which causes irritation of the skin and excessive grooming by the deer. Eventually, this excessive grooming leads to loss of the guard hairs, leaving yellow or white patches along the sides. Infestations are heaviest during late winter and early spring, and many affected deer, especially

fawns, die during this time. The geographical distribution of HLS has steadily expanded since its first appearance and now affects black-tailed deer throughout their range in western Washington and western Oregon. This species of lice has been found on elk in Washington, but does not result in the severe hair loss seen in deer. To date, the presence of this louse has not been documented in mule deer or white-tailed deer in Washington east of the Cascade Range.

Beginning in 2003, WDFW began to receive reports of deer from the Yakima area of south-central Washington with clinical signs similar to HLS. These reports were of deer occurring in the black-tailed/mule deer intergrade zone in the eastern foothills of Cascade Range, and were the first reports of apparent HLS in eastern Washington. Reports of more severely affected deer were received in 2004. In March 2005, lice were collected from four affected deer and identified as Bovicola tibialis, yet another exotic old world species with fallow deer as the normal host.

During the early spring of 2006, WDFW received numerous reports of dead deer, especially fawns, in the Yakima area with hair loss. The geographical extent of reports received in 2006 had expanded greatly compared to previous years and included occurrences of the condition in mule deer. Aerial surveys and harvest statistics suggest that the deer population in Yakima and Kittitas counties has declined by about 50% since the arrival of the lice. It is unknown if Bovicola tibialis infestations are the sole reason for the drop in deer numbers, but they are suspected to be a factor.

Bovicola tibialis is also associated with hair loss in deer in Klickitat County. In Chelan County, the occurrence of Bovicola tibialis was documented in 2009, and by April 2010, deer affected by

hair loss were observed throughout the county's mule deer winter range. Neither species of the exotic lice described above affect humans or domestic animals.

In captive settings, deer have been successfully cleared of lice infestations with the use of medication. However, in free-ranging situations, there is no practical method for delivering effective doses of medication to large populations of wild deer.

Other hair loss conditions seen in deer, elk, and moose

Normal molt: Deer, elk, and moose normally shed their hair ("molt") twice per year. In the spring they shed their winter coat, and in the late summer they shed their summer coat. The distribution of hair loss is usually patchy, and the deer tend to look "scruffy" until the molt is completed (Figures 3 and 4). Normal molt can be distinguished from disease conditions of the skin by the presence of a normal appearing coat beneath the molting hair.



Winter Ticks: Winter ticks

(Dermacenter albipictus) commonly cause hair loss in deer, elk, and moose. As indicated by the name of the tick, this condition is most often seen in the winter when adults of this species of tick typically feed on animals. Hair loss is usually limited to the neck and shoulder regions where the animals cannot reach to remove the ticks by grooming (Figures 4 and 5). The engorged ticks fall off in the early spring and animals usually grow their

hair back. Occasionally, especially in moose, tick burdens can become very heavy and hair loss occurs all over the body. In severe cases, moose can die from heavy winter tick infestations.

Mange: Rarely, an individual deer, elk, or moose will develop severe mange caused by microscopic mange mites, usually in the genus Demodex. When this occurs, it is usually an indication that the animal's immune system is not functioning properly. It is not uncommon to find that these animals are suffering from a variety of other maladies in addition to mange. Sporadic cases can occur at any time of the year. Severe mange is characterized by hair loss over most of the body, as well as thickening, wrinkling, and darkening of the skin, which often exudes a foul odor.



Above disease photos by Nancy Curry, Briggs Hall, Dave Kuehn, Scott McCorquodale, Paul Wik, and Mark James.

Chronic Wasting Disease (CWD)

Chronic wasting disease (CWD) is a fatal illness of deer, elk and moose. CWD is a transmissible spongiform encephalopathy (TSE). Other TSE's currently known to science include scrapie in domestic sheep, bovine spongiform encephalopathy (BSE) in cattle, kuru in humans, and Creutzfeldt-Jacob disease in humans. CWD has not been found in Washington's wildlife, despite having tested thousands of animals over the past 15 years. However, the disease can be brought to new locations through the movement of infected animals or animal parts such as bone, organs and bodily fluids. Once present in the environment, the prions can persist for many years and are very difficult to deactivate. CWD has been found in animals in 23 different states and provinces in North America.

Although CWD has never been documented in Washington, hunters should still exercise caution when hunting deer and elk. Don't harvest an animal that appears sick or is behaving strangely. Wear rubber gloves while field dressing the animal. Don't eat the brain, spinal cord, eyes, or spleen.

WDFW has been conducting targeted surveillance sampling for CWD since 1995. When deer and elk show symptoms similar to CWD, samples are collected by Department staff and sent to a laboratory in Wyoming to be tested. To date, all of the samples tested from Washington deer and elk have been negative for CWD. One of the difficulties in testing for CWD is that no test currently exists that can be conducted on live animals. Only brain stem samples from dead animals can be tested. Therefore the two best sources for test subjects come from hunter-harvested deer and elk and road-kills. At this time, we have no reason to believe that CWD occurs in Washington. With the cooperation of hunters, the expanded testing effort will provide an increased level of confidence that Washington deer and elk are CWD free.

Elk

Washington state is home to two sub-species of elk. Rocky Mountain elk occur east of the Cascade Crest, while Roosevelt elk are located on the Olympic Peninsula. Hybrids, or genetically mixed populations of Roosevelt elk and Rocky Mountain elk, are common in the Cascade Range. Rocky Mountain elk are slightly lighter in color and generally smaller than Roosevelt elk. The antlers of Rocky Mountain elk are typically more slender, have longer tines, and are less palmated than Roosevelt elk antlers.

Elk are hardy animals that have few physiological needs for cover. They do, however, use cover during extreme weather, to avoid hunters, or when they are harassed. Cover also conceals newborn calves from predators. Ideal elk habitat includes productive grasslands, meadows, or clear cuts, interspersed with closed-canopy forests. Year-round ranges for Rocky Mountain elk vary from 2,500 to 10,000 acres, and usually include distinct summering and wintering areas. Year-round ranges for Roosevelt elk are smaller, usually 1,500 to 4,000 acres, because they are generally found where the climate is less severe and where food and cover are more readily available.



Photo by Ginger Holser

Roosevelt Elk

Roosevelt elk, named after U.S. President Theodore Roosevelt, occur in the Coast Range, the Olympic Range, and other areas west of Interstate 5. Olympic National Park in northwest Washington holds the largest number of Roosevelt elk living anywhere (about 5,000). True Roosevelt elk occur in the Olympic Mountains region. All other elk in western Washington are a genetic mixture of Roosevelt and Rocky Mountain elk.

Species Description

- Bodies are light brown to tan except the rump area, which is a beige or white color. Legs and necks are generally a dark brown to black.
- Bulls have antlers, cows do not.
- Bulls weigh between 700 and 1,100 pounds and stand about five feet tall at the shoulder
- Cows weigh between 575 and 625 pounds and stand about four and a half feet at the shoulder.
- Largest bodied elk in USA.
- Antlers have points that extend off of a vertical main beam and can develop a distinctive crown or three-point tip.

Hunting techniques

When going to a new area, hunters will do best to cover as much ground as possible. Note areas where sign can be seen along roads and landings. Often times, landings are not graveled, making it easy to see fresh tracks. Scouting will reveal what areas hold elk and where to focus more intensive scouting and hunting efforts.

After identifying areas with abundant elk sign, hunters should focus on stands that provide cover and are adjacent to clear cuts. Hunting pressure can also force elk to use areas that provide thicker cover or are more inaccessible to hunters because of topography. Later in the season, consult a topographic map and find "benches" located in steep terrain with thick cover. Elk often use these benches to bed down during the day.

Finally, don't let a locked gate (provided that non-motorized access is allowed) keep you from going into an area to search for elk. Frequently, these areas hold elk that have not received much hunting pressure, making them less skittish and easier to hunt.

Rocky Mountain Elk

Rocky Mountain elk occur primarily in the mountain ranges and shrub lands east of the Cascades Crest. Small herds have been established, or reestablished, throughout other parts of western Washington. Rocky Mountain elk populations currently in Washington stem from elk transplanted from Yellowstone National Park in the early 1900s.



Photo by WDFW

- Species description
 - Bodies are light tan except the rump area, which is a beige color. Legs and necks are generally darker than the body
 - Bulls have antlers, cows do not.
 - o Bulls weigh about 700 pounds and stand about five feet tall at the shoulder
 - Cows weigh about 500 pounds and stand about four and a half feet at the shoulder.
 - Largest antlers of elk in USA.

Hunting Techniques

Rocky Mountain elk inhabit the sprawling forests and grasslands of eastern Washington. They can be located by getting on a high ridge and glassing for the herd. Being at that glassing location at first light will allow for more hunting time and a better chance to locate the herd because they typically feed right at daybreak. Once located, note what they are doing and start hiking. Upon getting into the general area that the elk were spotted, the hunter can determine which of the general elk hunting techniques to employ.

Once the hunting season starts, these elk have a lot of hunting pressure due to the ease of seeing them at long distances. When they are pressured, they will generally move to more remote locations. To be successful, the hunter may have to leave the roads behind and hike into the backcountry. Those who hunt the backcountry need to be aware of how they intend to transport the elk back to a vehicle.

General Elk Information Food and Feeding Habits

Elk require large amounts of food because of their body size and herding tendencies. In spring and summer, when food is plentiful, elk are mainly grazers, eating grasses, sedges, and a variety of flowering plants. In fall, elk increasingly become browsers, feeding on sprouts and branches of shrubs and trees, including conifers as a last resort when snow covers other plants.

During fall and winter, elk continue to eat grasses when they are available. Like deer and moose, elk are ruminants who chew their food just enough to swallow it. This food is stored in a stomach called the "rumen." From there, the food is regurgitated and re-chewed before being swallowed again, entering a second stomach where digestion begins. It passes into third and fourth stomachs before finally entering the intestine.

Look for broken shoots on browse plants. If these broken shoots are four feet or higher off the ground, it's likely elk browsing and not deer. This may mean that elk are using this area as a feeding area. If you have a good vantage point, this may be a spot to try during the season. See the table below for species specific food usage information.

Food plants used by Washington Elk		
Roosevelt Elk	Rocky Mountain Elk	
Trees		
Aspen Aspen		
Cottonwood	Chokecherry	
Red alder	Cottonwood	
Vine maple	Rocky mountain maple	
Willow	, Willow	
Shrubs and Groundcover		
Blackberry	Bitterbrush	
Huckleberry	Currant	
Oregon-grape	Deer brush	
Salal	Elderberry	
Salmonberry	Huckleberry	
Thimbleberry	Oceanspray	
Wild rose	Red-twig dogwood	
	Serviceberry	
	Snowberry	
	Sumac	
	Wild rose	
Forbs, Ferns, and Legumes		
Bear grass	Alfalfa	
Cat's ear	Clover	
Clover	Dandelion	
Cow-parsnip	Fireweed	
Fireweed	Sweet clover	
Foamflower	Yellow salsify	
Oregon oxalis		
Pearly everlasting		
Sword fern		



Photo by WDFW

Tracks

Elk have cloven hooves that normally resemble a split-heart shape on soft earth. An elk track is about four inches long and three inches wide and larger and more round than a deer track. It is also somewhat rounder and smaller than a moose track. The dewclaws on all four feet may register in several inches of mud or snow. Hoof prints may be

splayed wide on slippery surfaces, or when the animals were running.

Elk trails are often several animals wide and quite noticeable at the transition from grassland into brush or woodlands. Elk are much easier to track than most animals due

to their weight. They generally leave tracks in or on almost anything they walk over. Tracks are often found in large numbers, indicating a passing herd, and can be easy to follow.



Drawing by WDFW



Photo by WDFW

Droppings

Elk droppings may be the same general shape and texture of deer droppings. Individual pellets are usually dimpled at one end and have a small projection at the other, giving them an almost acorn-like shape. However, elk droppings are slightly larger, and whereas an adult deer may leave 20 to 30 pellets at a time, elk may deposit twice that many. This difference in volume becomes especially apparent when a rich diet causes the animals' droppings to become a soft mass, similar to a domestic cowpie, but smaller.

Wallow Sites

Probably the most easily identified elk sign is the mud wallow scented with urine and droppings. Bull elk roll in wallows to cover their bodies with scent, creating bathtub-size depressions with low walls of displaced mud ringing their perimeters. Receptive cow elk, drawn by the odor, will also roll and urinate in the wallow, indicating their willingness to mate. Elk that use these wallows may become so foul smelling that, when downwind, humans can easily detect their presence.

Elk also roll in mud wallows to loosen their dead winter coats and help dislodge annoying parasites. A coating of mud also provides some degree of protection from bloodsucking insects.

Mud wallows are musky smelling and if actively being used, will have fresh hoof prints all around. Wallows are found where the ground is wet and muddy, usually near water and almost always in a secluded area where elk feel relaxed enough to drop their guard. Abandoned

wallows will likely be filled with water, have grasses growing around them, and may develop into breeding sites for frogs and salamanders.

Bedding areas

An area of flattened vegetation three to four feet long and two to three feet wide indicates where an elk has bedded down. Elk sleep in dense cover or tall grasses and may return to the

same spot over many days. Since elk often travel in small groups, there may be several "elk beds" in the same vicinity. During winter, similarly sized depressions in the snow, often littered with old hairs, characterize bed-sites. If you know about these sites, it can be effective to set up near the site and watch for elk coming back to bed down at dusk or getting up in the morning. The elk can also bed for a midday nap.



Photo by Jimmy Montgomery

Rubs

As antler growth ceases in late summer and antlers finish mineralizing, the blood supply to the velvet begins to deteriorate. This causes the velvet covering of the antlers to dry up and shred. As it dies, bulls begin to vigorously rub their antlers on shrubs and trees, to help rid them of the velvet. This rubbing behavior may also be the first ritualized use of the bull's newly hardened antlers. It can be quite noisy and attract the attention of other elk.

The rubbing also covers the bone-white antler with plant compounds that subsequently oxidize and stain the antlers to their characteristic dark brown color. Antler color can also be influenced by blood and how long the bull stays in the open country where antlers are exposed to the sunlight.

Regardless of the cause of this behavior, the result is obvious. Small saplings and shrubs are left looking like someone with a hedge trimmer went on an angry rampage. In areas where elk are abundant, mangled foliage is an extremely obvious sign of the presence of bulls. These rubs occur before the rut begins and the bulls that made them may be miles away from them, but it is an indication that the area has been used by elk.

General Elk Hunting Techniques

There are three basic hunting techniques used in elk hunting: spot and stalk, stand hunting, and still hunting.

Spot and stalk hunting is by far the most used hunting method by elk hunters. This technique is where a hunter surveys areas likely to be used by elk, usually aided by binoculars or a spotting scope. Once a legal elk is spotted, the hunter then sneaks to within range of the elk in hopes of

getting a shot. Spot and stalk is commonly used in more open habitats where elk can be spotted at a distance. It can also be used when animals have been observed by a hunter and the hunter has not been detected.

Stand hunting is best described as waiting in ambush, where hunters positions themselves at a place along a trail, feeding site, or other elk use area and waits for a shot to present itself. Ground blinds or tree stands are commonly employed in stand hunting, although many stand hunters simply lean against a tree or sit on a stump near a likely area or travel corridor. This type of hunting should only be used when animals are close and using the area. Elk are more apt to move longer distances and use bigger areas than deer. If there is water present and elk sign, this would be a good place to set up a stand or blind and hunt the water hole.

Still hunting requires the hunter to move very slowly and quietly through elk habitat in hopes of seeing a legal elk before it reacts to the hunter's presence. Although all forms of elk hunting are challenging, still hunting is perhaps the most challenging. Successful still hunters move at a snail's pace, taking three or four steps at a time, before stopping to look and listen. It is important that the hunter move into or across any prevailing wind so as not to be smelled by an elk.

Elk Hoof Disease

Since 2008, reports of elk with deformed, broken, or missing hooves have increased dramatically in southwest Washington, with sporadic observations in other areas west of the Cascade Range. While elk are susceptible to many conditions that result in limping or hoof deformities, the prevalence and severity of this new affliction – now known as treponeme-associated hoof disease (TAHD) – suggested something altogether different.



Han, S., K. Mansfield, et al. (2011 in draft)

Diagnostic research conducted by the Washington Department of Fish and Wildlife (WDFW) in conjunction with a panel of scientific advisors found that these abnormalities were strongly associated with treponeme bacteria, known to cause digital dermatitis in cattle, sheep and goats. Although this type of disease has plagued the dairy industry for decades, TAHD had never before been documented in elk or any other hooved wildlife species.

Since then, WDFW has continued to work with scientists, veterinarians, outdoor organizations, tribal governments and others through its Hoof Disease Technical Advisory Group and Public Working Group to develop management strategies for elk infected by TAHD.

Several aspects of TAHD in elk are clear:

- **Susceptibility:** The disease appears to be highly infectious among elk, but there is no evidence that it affects humans. TAHD can affect any hoof in any elk, young or old, male or female.
- Hooves only: Tests show the disease is limited to animals' hooves, and does not affect
 their meat or organs. If the meat looks normal and if hunters harvest, process and cook
 it practicing good hygiene, it is probably safe to eat.
- **No treatment:** Currently, there is no vaccine to prevent the disease, nor are there any proven options for treating it in the field. Similar diseases in livestock are treated by forcing them to walk through foot baths and cleaning and bandaging their hooves, but that is not a feasible option for free-ranging elk.

Counties with confirmed cases of TAHD

As of July 2018, WDFW had confirmed cases of elk afflicted with TAHD in Clark, Cowlitz, Grays Harbor, Lewis, Pacific, Pierce, Thurston, Mason, King, Skamania, Klickitat and Wahkiakum counties. The April 2018 discovery of TAHD in the Trout Lake Valley in western Klickitat County was the first documented east of the Cascades in Washington. Since 2015, the Oregon Department of Fish and Wildlife has also confirmed TAHD in elk populations in both western and eastern Oregon.

How hunters and others can help

State wildlife managers are asking for the public's help to monitor and prevent the spread of TAHD in several ways:

- Leave hooves: Scientists believe that treponeme bacteria may persist in moist soil and spread to new areas on the hooves of infected elk. For that reason, WDFW requires hunters to remove the hooves of any elk taken in affected areas and leave them onsite.
- Report elk: Hunters can help WDFW track TAHD by reporting observations of healthy or limping elk as well as dead elk with hoof deformities using the reporting tools on this page.
- Clean shoes and tires: Anyone who hikes or drives off-road in a known affected area can help minimize the risk of spreading the disease to new areas by removing all mud from their shoes or tires before leaving the area.

Diagnosing and monitoring TAHD in elk

From 2009 through 2014, WDFW collected hooves and tissue from 43 elk and partnered with the USDA National Animal Disease Center and four other diagnostic laboratories to analyze them in an effort to find the cause of the disease. The samples were taken from elk in areas of southwest Washington known to be affected by the disease as well as those believed to be free of the disease.

By 2014, all five laboratories had identified treponeme bacteria in samples from diseased elk but not in those from healthy elk, providing evidence of the role of treponeme bacteria in causing the disease. Those findings were independently reviewed and accepted by a WDFW technical advisory group, composed of the State Veterinarian's office, state public health officials, university researchers and other specialists.

Since then, the department has continued to partner with leading experts to better understand this disease, and has initiated a <u>variety of field studies</u> to assess the distribution and prevalence of the disease, along with its effect on elk survival and productivity. WDFW is also working closely with Washington State University's College of Veterinary Medicine, which was designated in 2017 by the state Legislature as the state lead in assessing the causes and potential solutions for elk hoof disease.

WDFW continues to encourage the public to report observations of elk with hoof deformities on the on-line reporting web tool. For more information on Hoof Disease, please see the department's website, https://wdfw.wa.gov/species-habitats/diseases/elk-hoof.

Moose

Washington's moose belong to a subspecies called "Shiras" moose, which is physically smaller than more northern-dwelling moose. Approximately 3,000 moose are estimated to live in Washington State. The majority of these reside in the Selkirk Mountains (Pend Oreille, Stevens, Ferry, and Spokane counties) with smaller populations in the north Cascades, Okanogan, and Blue Mountains. Moose have been documented to wander into many other places throughout the state including the high desert country of the Columbia Basin. Generally, moose prefer



Photo by WDFW

forested habitat where there are lakes, marshes, and other wetlands. Moose have expanded their geographic range in some states, but most locations include cold winters with seasonal snow cover which is due in part to their large bodies; moose prefer temperatures below 60°F in summer and below 32°F in winter. With its great size and forage demands, the home range of the average moose in any given season is approximately three to six square miles, although they habitually wander much further.

Adult moose measure nearly six feet at the shoulder, are dark brown, and have long-legs with massive shoulders. They have prominent muzzles with an overhanging upper lip, and a large flap of hair-covered skin that hangs beneath the throat called a "bell" or a dewlap. Adult males or bulls have broad, flat, palmated antlers tipped with a number of points, depending on age

and health. Yearling males have forked antlers and by about five years of age the familiar palmated rack has developed. Antlers are shed during the winter and regrown each spring.

Forest Service Ranger Stations located in Newport and Colville are good sources of information on moose, weather, and forest road conditions or restrictions. The Washington Department of Natural Resources (DNR) also sells maps and has a regional office located in Colville.

Food and Feeding Habits

Washington moose predominately consume twigs, bark, and leaves of trees. In areas with abundant wetlands, moose will eat aquatic vegetation and willows. Species of plants that are of specific interest to moose include fruit tree branches, dogwood, willow, aspen, birch, fir, and pine species. But in less wet areas, like northeast Washington, they also eat the woody browse in early stages of regrowth following disturbances like fires, logging, and clearing. Moose are considered a pioneering type animal and adapt to a variety of available forage that change seasonally. Moose tend to feed in and around aquatic areas like lakes and rivers.

Tracks

Moose tracks are generally the same shape as deer tracks, however the size of the tracks are very large. They measure about 4 to 6 inches long from toe to heel and about 3 to 5 inches wide. Moose dew claws can sometime be seen in certain soft ground like snow or mud.



Photo by Dana Base

Droppings

Moose droppings are similar to deer and elk droppings but much larger. The droppings are egg shaped and about one inch in length.

General Moose Hunting Techniques

Moose hunters generally use spot and stalk methods to hunt moose. A good pair of binoculars or a spotting scope will increase odds of spotting a moose. Moose are drawn to north slopes or east flowing drainages, which are cool and moist. They tend to avoid steep (more than 45° slope) and rocky areas. Late fall and early winter snowfall does not seem to deter moose in any way.

Since moose rut from mid-September to early-October, this is generally the most effective time to hunt them, especially if the hunter is using moose calls. Hunters using calls should stay on stand for at least one hour or longer, as bulls come to the call from long distances. Early in the season moose are widespread and snow is usually not present for tracking, so road access is still good in October. Usually by some time in November snow is common, and locating moose tracks as well as seeing these dark animals against a white background of snow becomes much easier. However, by late November there is frequently deep enough snow at the higher elevations (more than 4,000 feet) to limit hunter access by road when moose hunting.

Moose Observation Survey

WDFW is asking for hunters help by reporting moose sightings from Sept. 1 through Nov. 30 in Regions 1 and 2. This time period provides the best information to better understand moose status, productivity, population trends, and the effects of hunting, predation, disease or tick outbreaks. Department biologists and scientists will use this moose information to help better establish the status and trend of Washington's moose population. This in turn will create better scientific studies that will help our biologists make conservation and management decisions.



Photo by D.A. Kuehn

Specific locations from this form are not displayed publicly, but are considered and evaluated in our Moose Progress Report. Please go to the site, https://wdfw.wa.gov/get-involved/report-observations and select Moose. The department is also interested in reports of no moose sightings.

Observations from other times of year are helpful but not as closely tied to significant moose life history, like calving, sex ratios, and disease.

Please note: This does not take the place of regulation-required Hunter Reports after hunting season.



Black Bear

Black bear are the most common and widely distributed bear in North America. In Washington, black bears live in a diverse array of forested habitats, from coastal rainforests to the dry woodlands of the Cascade's eastern slopes. In general, black bears are strongly associated with forest cover, but they do occasionally use relatively open country, such as clear-cuts and the fringes of other open habitat.

Black bears can have a variety of coat colors, including blonde, cinnamon, dark brown, or black. It is necessary when hunting black bear to distinguish a black bear from a grizzly bear. Grizzly bears are federally protected and cannot be hunted in Washington. The most common areas where hunters may encounter grizzly bears are in northeast Washington and the northern cascades. Below is a guide on how to differentiate a black bear and a grizzly bear.



Food and Feeding Habits

Black bears are omnivores, eating eat both plants and animals; however, their diet consists mostly of vegetation. In the spring, black bear diets consist mostly of herbaceous plants, from emerging grasses and sedges to horsetail and various flowering plants. In summer, bears typically add ants, bees, grubs, and a host of later emerging plants to their diet. During late summer and fall, bears typically shift their diet toward tree fruits, berries, and nuts, but they still may consume a variety of plants. Fall is a critical season for black bears and they commonly acquire most of their annual fat accumulation at this time. Bears may forage up to 20 hours a day during fall, increasing their body weight by 35 percent in preparation for entering their dens for the winter. Typically, a small proportion of the black bear's annual diet is made up of animal matter, including insects, mice, voles, ground squirrels, fawns, calves, eggs, carrion (animal carcasses), and fish, but the availability of their food varies and is often unpredictable. Occasionally, a bear may take livestock. Black bears have adequate senses of sight and hearing, but their keen sense of smell and innate curiosity make them skilled scavengers. They consume carrion when they can find it, and are notorious for taking advantage of human irresponsibility with food, garbage, and bird-feeders. Bears will eat anything that smells appealing and will help them prepare for the several months spent in the den in winter. Black bears move in response to the seasonal availability of food, roaming constantly throughout their home range.

Tracks

All black bear prints usually show four digits with the fifth one becoming visible in softer materials such as snow and sand. The toes form a rough semicircle in front of each foot, with

the middle toe being the longest. Front foot tracks have small footpads that average four inches wide by two and a half inches long, whereas hind foot tracks characteristically show an extended footpad that average three and a half inches wide by six inches long, resembling a human foot. The claw marks are about one half inch in front of the toe pads, but often the claw marks do not show in a track.

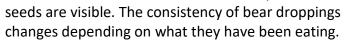


Droppings



When plants, insects, and animal carcasses make up most of a bear's diet, its droppings are cylindrical and typically deposited in a coiled form, sometimes in individual segments. Segments are two to three inches long and one and a quarter to one and a half inches in diameter. Bits of hair, fur, bone, insect parts, and plant fibers distinguish these droppings from human feces, as does the large size

of the deposit. Color ranges from dark brown to black, and when grasses are being heavily eaten, droppings are often green. When fruits and berries are in season, droppings assume a moist, "cowpie" form and





Bear Trees

Black bears may leave a variety of marks on trees. Because young bears often climb trees, those trees in high bear density habitats will show the telltale claw marks and hairs indicating that a bear has previously climbed the tree.

On young conifers, particularly Douglas-fir trees, bears may rip strips of bark off with their teeth to expose the cambium layer, which is then consumed. The bear's teeth leave long vertical grooves in the sapwood and large strips of bark are found around the bases of trees they peel. These marks are typically made from April to July when their preferred food items are not yet available, but the resulting teeth marks may be seen all year. This foraging activity is common in tree plantations where large stands of trees are similarly aged and of a single species.

A bear may also rub its back against a tree or other object. Rubbing is a summer pastime among black bears, which may serve as a means of communication, announcing their presence to other bears, and/or relieving the torment of biting insects and loosening their thick, matted winter coat. Good scratching trees may be used repeatedly for several years, and are easily identified by the large amounts of long black or brown fur caught in the bark and sap. Roughbarked trees often serve as rubbing posts.

Feeding Areas

Rotting logs and stumps are commonly turned over and torn apart to expose fat-rich grubs, ants, termites, worms, and spiders. A bear may also dig into anthills and bee/wasp nests to obtain the larvae and adult insects inside. Many bears consider these a delicacy.

Huckleberries and other fruiting shrubs may show signs of being crushed under a bear's feet. Bears may also dig for the starchy roots of some plants, to excavate seed caches of squirrels and mice, and to capture mice, voles, and ground squirrels. Black bear digging may look like anything between well-defined holes to large areas that appear to have been rototilled. Black bears love fruits such as apples, pears, and cherries. Typically, they eat the fruit that has fallen on the ground first but may climb into the trees resulting in broken limbs. For this reason, it's important that privately owned fruit trees be picked regularly as they ripen, all the way to the top.

General Bear Hunting Techniques

Spot and stalk methods through large berry patches found in clear cuts or avalanche chutes in the late summer or early fall can be a very effective hunting technique for bear. Similarly, spot and stalk is the most common hunting technique during the spring season, where hunters can glass open areas where bears are feeding on the first grasses and forbs to emerge. Finding a location with good visibility that offers the ability to utilize binoculars can also aid in the likelihood of harvesting an animal. Hunters are advised to take the time necessary to identify and differentiate between a solitary bear and a female with cubs, which are protected by law. Predator calls can also be effective with black bear. Shot placement for bear is very important and should be a priority for hunters. The area hunters tend to target for shot placement can be compromised by a bear's dense bone structure and physical mass. A broadside shot is best, with the front leg moving forward, exposing the organs. If the front leg is moving back, the shot is likely to hit bone, which may result in injury or wounding loss.



Cougar

Sleek and graceful, cougars are low-density, solitary, and secretive animals rarely seen in the wild. Cougars are also known as mountain lions or pumas. Cougars are the largest members of the cat family in North America. Adult males average approximately 140 pounds and measure seven to eight feet long from nose to tip of tail. Adult males stand about 30 inches tall at the shoulder. Adult female cougars average about 25 percent smaller than males. Cougars vary in

color from reddish-brown to tawny (deerlike) to gray, with a black tip on their long tail.

Cougars occur throughout Washington where suitable cover and prey are found. The cougar population is estimated to be 2000 to 2500 animals. Because cougars are a density-dependent species, population fluctuations are uncommon but they are susceptible to decline. In

Washington, cougars are managed for stability and older age classes. Currently the population is stable.

Food and Feeding Habits

Cougars are most active from dusk to dawn, although they sometimes travel and hunt during the day. Adult cougars typically prey on ungulates, small mammals, and birds, with deer being the preferred and most common prey. Except for females with young, cougars are lone hunters that wander between places frequented by their prey, covering as much as 15 miles in a single night. Cougars rely on short bursts of speed to ambush their prey. A cougar may stalk an animal for an hour or more.

Cougars usually carry or drag their kills to a secluded area under cover to feed, and drag marks are frequently found at fresh kill sites. After killing a large animal, a cougar usually feeds on it for three to five days and often will cover the remains with debris such as snow, grass, leaves, sticks, or soil in between feedings. Even where little debris is available, bits of soil, rock, grass, or sticks may be used to cover the carcass.

Tracks

Cougar tend to leave "soft" tracks, meaning the animals make very little impact on the ground, and their tracks may be virtually invisible on packed earth or crusted snow. To preserve their sharpness for gripping prey, these animals keep their claws retracted most of the time, and so claw marks are rarely visible in their tracks.

Because cougars carry their heavy tail in a wide U shape at a normal walk, in snow, the lowermost portion may leave drag marks between each print.



Droppings

Cougars generally cover their droppings with loose soil. When visible, their droppings typically resemble those of most species in the dog and cat families. However, cougars have well developed premolars that can slice through bone and hide. Therefore, their droppings often show chunks and fragments of chewed bone and considerable hair from the hide. Members of the dog family gnaw on bones but usually don't chew them up into cut fragments.

Cougar droppings are generally cylindrical in shape, segmented, and blunt at one or both ends. An average dropping measures four to six inches long by an inch to one and a half inches in diameter. The size of the dropping may indicate the size of the cougar.

General Cougar Hunting Techniques

Because cougars are a low density carnivore, hunting in areas after a snowfall greatly increases a hunter's odds of finding a cougar. Hunters should scout areas with consistent sign of deer or

elk for fresh tracks and establish a hunt perimeter in that area. Hunters are advised to take the time necessary to identify and differentiate between a solitary cougar and a female with kittens, which are protected by law. Where tracks or other sign is discovered, predator calls can solicit a cougar's curiosity and a site visit, but a hunter should be concealed, still, and quiet, as cougars have a keen ability to sense movement and sound, and are cautious as they approach to investigate. A broadside shot is best to insure an effective harvest.

Upland Birds Pheasant

The ring-neck pheasant is one of the largest and certainly the most brightly colored of



Photo by Kenny Collins

Washington's upland birds. An adult male (rooster) ring-neck weighs two and a half to three pounds and measures up to 35 inches from the tip of its beak to the tip of its tail. That long, pointed tail may account for over half the overall length. An adult hen pheasant weighs about two to two and a half pounds and has a much shorter tail.

The ring-neck isn't native to Washington, or even to North America. The first pheasants were brought from China and successfully introduced into western Oregon in 1881. Washington received its first ring-necks in 1883, and heavy plants were made in western

Washington in the early 1890s and in several areas of eastern Washington later in that decade. The first Washington pheasant season opened in 1897.

A few small, self-sustaining populations of ring-neck pheasants occur in the agricultural areas west of the Cascades, but the grain-producing lands on the east side of the state provide the

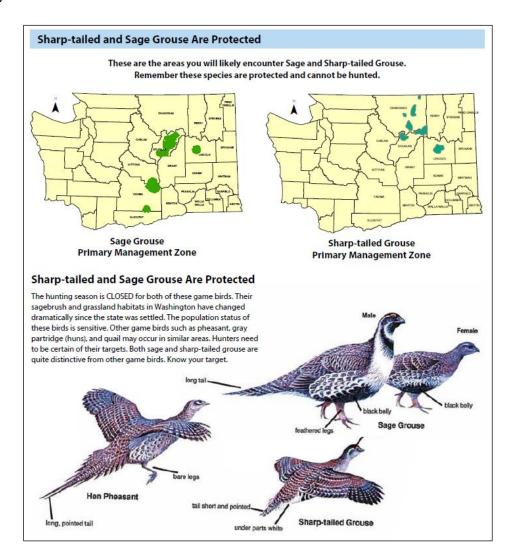
best pheasant habitat and the highest ring-neck populations. WDFW releases thousands of penraised birds in both eastern and western Washington, providing additional opportunity for upland bird hunters.

Eastern Washington hunters are only allowed to harvest roosters (male pheasants). They have the distinct ring around their neck, a green head and red feathers around their eyes. Female pheasants or hens are not legal to harvest in



Photo by Wikimedia Creative Commons, Charlesjsharp

eastern Washington. Either sex is legal to harvest when pheasant hunting in western Washington.



Hunting Strategies – Eastern Washington

Taking to the field early in the season provides the opportunity to get first crack at young, unwary, and "uneducated" birds that haven't yet figured out the dangers of getting too close to hunting dogs and people wearing hunter orange clothing. Those that survive the first week or two of the season tend to "smarten-up" and therefore, become harder to hunt. Starting the hunt early in the day gives the hunter an opportunity to hunt pheasants leaving their roosts to search for food and grit (for their crop), and active birds in more open country are easier to find. Like many game animals and birds, ring-necks are often most active during the first two hours of the morning and again during the last hour or two before dark.

Pheasants like to roost or rest in tall cover. Hunters want to walk along any ditch that has cover and is fairly close to agricultural fields. Cattail patches, standing crops (with farmer approval), thick stands of Russian olive and other trees, and high bushes are great places to hunt for

pheasants. In areas where corn and other grain or seed crops have been recently harvested, success can be had by hunting the cover immediately surrounding the cut fields for birds that didn't travel far from their former hiding spots.



Photo by WDFW

Early season pheasants often sit tight and flush fairly close, which makes them perfect targets for small groups of hunters. Walking in a zigzag pattern and staying fairly close together to cover more ground and keep pheasants from sneaking away between hunters is preferred.

Birds that survive the first few weeks of the season have learned that it's best

to avoid humans and their canine companions. Pheasants resort to hiding, changing their daily habits, moving to a new neighborhood and/or flying at the first sight or sound of hunters and their dogs. To be successful in harvesting pheasants, hunters must change tactics accordingly.

There are several ways pheasant hunters can benefit from teaming up rather than hunting alone. Three or four pair of legs can cover more ground and kick up a lot more birds into the air. This means more potential shooting opportunity for everyone involved. Two or more hunters can work both sides of a thick hedge row or brushy ditch line and get shots at birds that fly out on either side. Hunting a field of standing corn, a cattail patch or other tall cover can be an exercise in futility for a lone hunter, but with a small group you can send two or three hunters through the cover and post a couple of "blockers" at the far end of the patch to pick off exiting birds.

Hunting Strategies – Western Washington

Western Washington pheasant hunting is a different type of hunting. It resembles the style of hunt in North Dakota or South Dakota, where as a line of hunters walk a field. With this style of hunting, hunters will want to find a spot in the line that gives them a good zone of fire and will allow them to hunt cover that most likely holds birds. Edges of trees and fields are also a preferred place to find pheasants. Any cover that is thick at the top and more open towards the ground should hold birds. Western Washington pheasants are farm raised and released for hunters.

Quail

Both valley (California) quail and mountain quail are found in Washington. Valley quail are the more abundant of the two species and are found on both sides of the Cascades, although the largest populations and best valley quail hunting occurs in eastern Washington. Mountain quail can only be hunted in western Washington and are protected by a closed season east of the Cascades.



Photo by WDFW

The mountain quail, the largest member of the quail family, may weigh over half a pound, and measure 11 to 12 inches in length. Its head plume (top knot) is taller and straighter than that of the valley quail, especially when standing on the ground or perched. Males and females look very much alike, with chestnut-colored throat patches and chestnut sides with wide, white bars. They tend to travel in small coveys, usually 5 to 10 birds. Most common in California, Oregon, and parts of western Washington, they're the only quail that make an annual migration, moving upslope into the high country during the spring and returning to the lowlands in the fall.

Mountain quail are most likely to be found in two to six year-old clear-cuts, under power lines, and in tall stands of scotch broom. Their tendency to run rather than fly or hold for a pointing dog makes them an especially challenging upland game bird.

California (valley) quail are originally found from southern Oregon to the sound end of the Baja Peninsula and as far east as the western edge of Nevada. The valley quail has been introduced throughout much of the west, including Hawaii and British Columbia. Both males and females sport a curving plume, comprised of several small feathers, that droops forward. The male's plume is larger and darker than the females. Males have a dark brown cap and a black face edged in white, a brown back, a grey-blue chest and a light brown belly. Females and



Photo by WDFW

immature birds are mainly grey-brown with a light-colored belly. A covey of valley quail may range from a dozen to several dozen birds.

Valley quail habitat is widespread and includes thick tangles of trees and tall brush, especially near stream beds, small ponds and wetland areas. They also inhabit valley bottoms with patches of Russian olive, oak or high sage, patches of low brush, weeds or tall grass. Valley quail can also be found along edges of standing corn, wheat or other grain fields and medium to heavy cover surrounding harvested fields.



Photo by WDFW

Hunting Strategies

As with other upland game birds, it is possible to hunt quail without a dog. One strategy is to travel back roads looking for tracks, droppings, and dusting holes that indicate there may be birds nearby. When evidence of birds is found, walking the edge of the road in short bursts, stopping at least 15 or 20 seconds before moving on often near patches of roadside cover can be effective. If there are quail nearby, they may get nervous and take to the air. The same stop-and-go strategy may also work for a lone hunter in relatively open areas with scattered patches of low to moderate cover.

Another strategy for quail hunters without dogs is to hunt in groups of three or more, alternately "playing dog" for each other. The idea is for one or more hunters to push through areas of heavy cover and flush birds into the open ahead of their hunting partners. This technique works best in fairly small areas and in narrow ribbons of cover. If the cover patch is too large, quail may simply run, or if they do flush, stay within their brushy haven and refuse to fly into the open.

A well-trained dog, of course, can do a better job of playing dog than a human can, and can be a huge hunting asset. The pointing breeds are great, especially in low cover and open, shrubsteppe country, but a tough flushing dog might offer an advantage in the kinds of thick cover where valley quail often hide. Any well trained dog can improve chances for a successful hunt.

Regardless of hunting situation or strategy, quail hunters are likely to harvest more birds if they listen as well as watch. Quail are very "talkative" birds, and use various calls and clucks to communicate with each other, and hunters can use this to their advantage. When a covey is scattered, birds will often emit a sort of crowing whistle to locate each other. Such calls may also erupt around dusk, as birds roost for the night. Hunters can often get the chorus started with a quail call, and use the responses to help pinpoint likely hunting spots for the next morning.

A common scenario for quail hunters is to raise a covey and get one or two shots if they all take flight at once, or perhaps stand and shoot several times if birds raise one or two at a time and there's an opportunity to re-load between take-offs. When they scatter, quail may fly long distances, never to be seen again (at least not that day), or they may settle to the ground only a few dozen yards away and you can spend the next hour flushing singles and doubles. Those singles and doubles will sometimes hold very tight once they hit the ground, letting a hunter or dog walk right up on top of them before they fly. Those are the rises that may just about cause cardiac arrest, but also tend to provide hunters with the longest possible reaction time for a good shot.

If a covey is raised in or near trees and tall bushes, quail may resort to the frustrating tactic of simply flying up and perching in the overhead limbs, giving hunters no time for a wing-shot. Shooting sitting quail off tree limbs is the bird-hunting equivalent of shooting fish in a barrel, so you may find yourself resorting to throwing rocks and sticks to get them to take flight. It may be easier and more productive to walk away and return 30 to 60 minutes later, in hopes they'll have returned to the ground and can be flushed again.

Chukar Partridge

Chukars are native to Asia and southern Europe, and they thrive in dry, rocky, steep country. Although now found throughout the western United States and in parts of British Columbia and Mexico, some of the best chukar hunting is found in the Snake River region of Washington, Oregon, and Idaho.

An adult chukar measures 13 to 14 inches long and weighs about three-quarters of a pound, making it a little larger than a valley quail and a little smaller than a ruffed grouse. Also known as red-legged partridge and rock partridge, they're bluish-gray on the back, wings, and breast, with a buff belly and flanks marked with vertical bars of black and chestnut. A black band



Photo by Chuck Abbe

extends across the eyes and down the side of the head, neck, and upper breast. The throat is white, while the beak, legs, and feet are red.

Typical chukar habitat features cliffs, bluffs, canyon walls, talus slopes and other generally vertical terrain. They not only roost in steep, rocky areas, but feed on grains, seeds, forbs and grasses they find among and around the rock piles and cliffs. Brush provides nesting cover in spring and shade from the summer heat, so sage, greasewood, and other bushy vegetation is an important part of their habitat. Although they don't require as much water as other upland bird species, there's usually a water source close to where these birds congregate.

Hunting Strategies

Chukar will sometimes move down to flatter ground to feed at the edge of wheat or hay fields, but chukar hunting usually involves hiking, climbing and crawling up and down steep slopes, around the edges of rock outcroppings and canyon walls. Chukars often feed throughout the

morning and then move to shady slopes and draws, dusting sites and water holes during midday. They'll usually begin moving back toward steeper roosting areas late in the afternoon.



Photo by WDFW

Later in the fall, as snow begins to accumulate in eastern Washington's chukar haunts, they tend to congregate in areas that are relatively free of snow. Pursuing these birds over snow and ice-covered rocks on their home turf can be risky, but also productive.

While legging it out all day and flushing coveys wherever you find them is standard chukar-

hunting procedure, there are other ways to find birds. One is to scan distant slopes with binoculars, looking for feeding or roosting birds, then get into position for a stalk.

Listening for the clucks and cackles that give the chukar its name is another way to locate birds. Like quail, they call to help maintain contact among members of a covey, and attentive hunters can use those sounds to pinpoint the birds whereabouts. You can also use a chukar call to draw a response and get the conversation started.

Whenever possible, chukars should be approached from above. While they tend to fly downhill, they usually run uphill. Chukar are notorious for running out of shooting range before rising, and they can get up a hillside much faster than humans can. Chasing a covey of runners up the side of a mountain rarely produces a good shooting opportunity. There is a rather high probability that at any given time of day most birds will be at the same approximate elevation. So if a covey is flushed at one point along a hillside, move uphill about 10 to 20 feet continuing along that line may put the hunter just above the next covey.

Chukars have a reputation for spooking easily, and not holding well for a dog, but, as in any upland bird hunting, a good dog is going to find chukars that even the best two-legged hunter won't find. A close-working pointer is a good choice as a chukar dog, but a pointer or flusher trained to work below birds and flush them back up toward you is even better. Remember, though, that the steep hills and cliffs that comprise chukar country pose a serious threat to undisciplined or unmanageable dogs.

Hunters who do not have a bird dog can still harvest chukar. One tactic is to do a stop-and-go push through, moving quickly while walking, then stopping for 30 seconds near cover to make hiding birds lose their nerve and flush.



Photo by WDFW

Gray (Hungarian) Partridge

Making their American debut in the late-nineteenth century, these European imports were first released in Washington and California but are now found in decent numbers in about a dozen western and Midwestern states and most Canadian provinces. The first birds released in this country came from Hungary, so the gray partridge is also commonly known as Hungarian partridge, or Hun.

Gray partridge grow to just over a foot long and weigh about three-quarters

of a pound. Classic Hungarian partridge country might be a field of corn or wheat stubble bordered or intersected by a couple of brushy draws or a gently-sloping hillside dotted with sagebrush. A small stream, pond, or wetland nearby would likely make such a spot even more attractive to a covey of Huns.

To most hunters, the gray partridge doesn't appear very gray at all. That's because they're most likely to see the bird's rust-colored tail and reddish-brown back and wings as it flies straight away from them. If the bird is crossing, hunters may see the chestnut and gray bars along its flanks. A horseshoe-shaped mark of dark chestnut covers the lower half of the breast.

Hunting Strategies

Hunters only harvest about 5,000 gray partridge a year, far fewer than any other upland bird. There are ways hunters that hunt gray partridge can improve their chances. First, covering a lot of ground is essential because population densities simply aren't high anywhere. The best bet is to cover miles of decent partridge habitat in hopes of flushing a couple of coveys in a day. Gray partridge like to feed around the edges of grain fields and in patches of seed-bearing weeds and grasses. They tend to roost, hide and rest in hay fields, tall grass, brush patches, and along fence lines. On windy days they may take shelter behind tree lines, fence rows, boulders, buildings, or in narrow draws and on lee hillsides.

Gray partridge tend to be more skittish than quail and other upland species, and may run or flush wild when a dog (or hunter) approaches. Some veteran partridge hunters prefer and

recommend dogs that are trained to lock up on point as soon as they detect gray partridge scent. When a dog does lock up on gray partridge, the hunter should move in fast to shorten the shooting distance before the birds fly. When flushed, gray partridge usually don't fly high, but they may fly far, especially later in the season when they've had some hunting pressure. Although flushed birds usually stay together, the good news is that if singles or doubles are located after the first rise, they tend to hold better for a dog than coveys will.



Photo by WDFW

Grouse

There are six grouse species that call Washington State home. They are the ruffed grouse, sooty



Flying sage grouse Photo by WDFW

grouse, dusky grouse, spruce grouse, sage grouse, and sharp-tailed grouse. Four of the six grouse are open for hunting in Washington. The sage and sharp-tailed grouse are protected endangered species and it is illegal to hunt them. These two grouse are generally found in prairie areas where large scale wildfires in

2015 altered the prairie habitats and home ranges of these species. Some of the



Flying sharp-tailed grouse Photo by WDFW

populations may have moved closer to forest grouse habitats. It is imperative to identify the grouse prior to shooting because of their close resemblance.

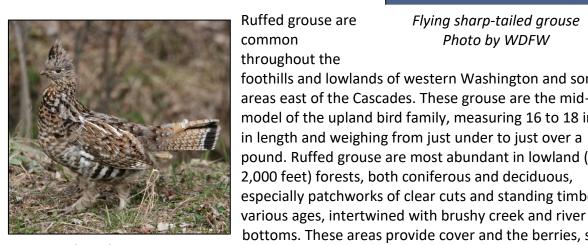


Photo by WDFW

throughout the foothills and lowlands of western Washington and some areas east of the Cascades. These grouse are the mid-size model of the upland bird family, measuring 16 to 18 inches in length and weighing from just under to just over a pound. Ruffed grouse are most abundant in lowland (under 2,000 feet) forests, both coniferous and deciduous, especially patchworks of clear cuts and standing timber of

bottoms. These areas provide cover and the berries, seeds,

plant and tree buds, clover, and other food sources grouse

need. Westside alder bottoms and eastside aspen draws are both good places to look for ruffed grouse, as are timber company lands interlaced with roads of various ages where grouse can dust and pick gravel.



Photo by WDFW

Sooty and dusky grouse used to be called blue grouse. These two grouse are the largest of Washington's grouse, with males measuring over 20 inches long and weighing as much as a pound and a half or more. The body of a male bird ranges in color from a light blue-gray to dark gray, with a yellow-orange comb over each eye. It has several white-based feathers on either side of the neck and has a fairly long, square tail. The smaller hen has a brown back, grayish under parts, and no comb. The sooty version is found in higher elevation (above 2,000 feet) conifer forests of the Olympics and on the western slope of the Cascades. The dusky version is found in similar habitat along the Cascades' east slope, in north-central and northeastern Washington, and the Blue Mountains.

Spruce grouse are less abundant and smaller than blue or ruffed grouse. They are found at even higher elevations than the blue grouse, and are somewhat more colorful. The spruce grouse is found in the lodgepole pine, subalpine fir, and Engelmann spruce stands of the Cascades, Olympics, and mountains of northeastern Washington. Male spruce grouse have a scarlet eye comb over each eye and a black patch that covers the throat and upper breast. The upper portion of the black patch is trimmed in white.



Photo by WDFW

Hunting Strategies

Washington hunters are lucky to have a four-month season on grouse. Hunters can hunt grouse with a big game or small game license. They can also be harvested with any legal hunting equipment. Grouse hunting is an easy introduction to hunting, whether it be youth hunting during deer season or walking in the woods throughout September. The cost of entrance is low and not much extra gear is needed. There are several ways to improve one's chances of bagging grouse regardless of the preferred hunting method.

One way is to spend time in the woods during the first two or three weeks of the grouse season. Family groups may remain together well into September, and one bird is located there's a good chance of flushing several birds nearby. Early season hunters might do well to concentrate their efforts at higher elevations than they would later in the season because some grouse often spend their summers feeding and rearing their young farther up the hillsides before making their way to lower elevations where food may be more plentiful as the weather worsens in late fall. Knowing where and what grouse are eating can be helpful in finding birds. The first thing many veteran grouse hunters do after bagging a bird is open up the crop to see

what it's been eating! The contents of the crop can often lead the hunter to habitat where more grouse can be found.

Logging roads, cat trails, and fire trails are good places to look for both ruffed grouse and blue grouse. Besides providing a ready source of grit and places for birds to dust, roads and trails allow hunters to cover more ground in less time. Whether hunting open ground or thick cover,



Photo by WDFW

a stop-and-go approach often works well on forest grouse, especially ruffs. A preferred approach is to stop briefly every 50 feet or so whenever coming to a spot that looks like especially good grouse cover. It is important to be ready to shoot when stopping because jittery birds often will fly when people get near them.

Ruffed, blue, and spruce grouse all have a reputation for not holding very well for a dog, and many Northwest hunters pursue them without a four-legged hunting partner. A pointer or flusher that will stay close, though, will find grouse that a hunter would otherwise pass by, and certainly can be helpful in finding downed birds, especially ruffed grouse in heavy cover. The "perfect" dog for this kind of hunting might be a pointer that stops short and locks up at the first hint of bird scent, rather than moving in closer and flushing birds out of range (or out of sight behind trees and brush).

Those who do hunt typical forest grouse cover with a dog might want to do something to make that dog easier to

see and/or hear. Many grouse hunters hang a bell on their dog's collar to help keep track of the dogs whereabouts and know when a pointer may have stopped and locked onto a bird. Others add a fluorescent orange vest to increase the dog's visibility in the woods.

Food and Feeding Habits

Upland birds will eat just about anything that provides them with nutrition. They will eat fresh green vegetation, seeds, fruit, invertebrates, plants, and sometimes small lizards or frogs. A field full of grasshoppers in upland bird country is sure to attract birds. They generally feed right after they come off the roost in the morning and continue to feed all day.

Roosting areas

Upland birds generally roost in dense cover areas. This can be in/under evergreen trees in western Washington or in Russian olive trees in eastern Washington. Anything that will help protect them from predators is a good spot to look for birds.

Waterfowl

Washington's extensive and diverse waterfowl habitats provide a wide range of waterfowl species and an even wider range of duck and goose hunting opportunities. We're lucky to have more species of ducks and geese in Washington State than most other states in the country. *Ducks at a Distance* is a booklet reprinted by the department that will help waterfowl hunters identify different duck species. The booklet can be found on the department's website at https://wdfw.wa.gov/sites/default/files/2019-01/duck id guide.pdf. Please refer to this publication for species information, identification, and additional information.

Washington provides wintering habitat for approximately 850,000 ducks, 125,000 geese, and 8,000 swans annually. In addition, the state provides habitat for approximately 160,000 breeding ducks and 50,000 breeding geese each spring and summer. The Pacific Flyway waterfowl population contains almost six million ducks, geese, and swans, and many of these birds pass through the state during fall and spring.

Almost all waterfowl visible in Washington (except swans) can be hunted, unless there are special closures due to low population numbers. They can be classified into these four categories: Puddle ducks, diving ducks, sea ducks, and geese.

Puddle Ducks

Puddle ducks, or dabblers, are most commonly (but not always) found in or around shallow water that can be either fresh or salt. They feed on a wide range of submerged vegetation, seeds, and aquatic insects by "dabbling" for food within a foot or two of the water's surface. Dabbling occurs when the ducks put their heads down and tails in the air to feed. Some of the puddle duck species may also be found in and around agricultural fields. This is especially common when those fields contain waste corn, wheat, and other seeds.

Mallards are the most common, largest, and most easily recognizable of the puddle ducks. The

mallard drake or "greenhead," is considered by many to be the grand prize of duck hunting.

The pintail is another large duck that is very common in Washington. It is recognized by its long wings, fast and graceful flight, and long, pointed tail from which it gets its name.

The medium-sized wigeon is also common, especially in the western and central parts of the state. It is known for



Photo by Eric W. Holman

its fast, somewhat erratic flight, and is recognizable from below by the white belly that contrasts with a much darker chest and tail.

Gadwalls are about the same size as wigeon and look similar from below, but are drab in color and not as common in the Pacific Northwest.

The shoveler is Washington's most unusual looking puddle duck. It has a large, wide bill that illustrates its common nickname, the spoonbill. Another mid-sized duck, it's usually found by itself, in pairs, or in small flocks. Drake shovelers are among Washington's most brightly colored ducks.

The drake wood duck is one of the prettiest ducks to call Washington home. A little smaller than the shoveler, the woody is often found around wooded ponds and streams. Unlike other dabblers, they spend some of their time perched in trees. Its diet of nuts and berries makes it a favorite on duck hunters' tables.

The green-winged teal is by far the most common of three teal species found in Washington. The other subspecies are the blue-winged teal and cinnamon teal. Teal are the smallest of Washington's puddle ducks. They can be seen flying quickly in tight, twisting formations, often only a few feet above the water, which makes them a challenging target.

Hunting Techniques

Puddle ducks are generally hunted over decoys or by jump shooting. Because they generally feed in shallower waters, smaller ponds can be effective hunting areas. As with all hunting, preseason and in-season scouting can also have an effect on where to hunt and what method to use.



Photo by Drew Austin

Diving Ducks

Diving ducks are generally found on larger and deeper bodies of water than puddle ducks. As the description indicates, they feed by diving, sometimes to great depths. Most diving species prefer small fish, snails, and shellfish, making them less desirable table fare in the eyes of many hunters. The canvasback and redhead are the exceptions. The diving ducks' fast flight make them especially challenging for hunters.

Although they're both diving ducks, the greater and lesser scaup prefer different habitats. The greater scaup spend most of their time on bigger, more open water and the lesser scaup are more likely to be found on smaller lakes and ponds.

However, the two species are known to mix in certain wintering areas. Only their size and a slight color variation on the back edge of the wings distinguish the two species.

The ring-neck duck is sort of short and bulky. They are more likely to be found around freshwater ponds and rivers than open saltwater areas. The white ring around the base of its bill is actually more recognizable than the ring around its neck.

The ruddy duck is a small diver with a longer tail than most other diving ducks. When on the water, it often holds its tail straight up in the air. While it's a fast flyer, a ruddy is as likely to dive and swim away from danger as it is to fly away.

The canvasback is highly prized among Washington hunters. Among the largest of all ducks, it's also one of the fastest flyers, which makes it a true challenge for hunters. Its long sloping bill, sloping forehead, and its red eyes set it apart from the nearest look-alike, the redhead.

A little smaller and a little slower than the canvasback, the redhead is often found in close proximity to canvasbacks. Since they look alike and can be found in proximity, the two are sometimes mistaken for each other. The redhead, though, has a brighter red, less sloping head, a darker back, and a more rounded tail than that of the canvasback.

Hunting Techniques

Since divers tend to inhabit larger ponds and larger bodies of water, hunters should concentrate their efforts in those areas. Decoying these ducks can be effective if birds can be found feeding along a shoreline. In some cases, hunters can be successful pass shooting from peninsulas and islands as some of these ducks tend to fly close to the water's surface.

Sea Ducks

Sea ducks frequent Washington's Pacific coast, coastal estuaries, and inland marine waters.

They can also be found from the Strait of Juan de Fuca to the southern end of Hood Canal and Puget Sound. Most sea ducks feed on invertebrates and small fish.

Scoters are Washington's most common sea duck. The surf scoter is the most abundant of Washington's three scoter species. The drake surf scoter, with its unusual and brightly colored head, is a unique trophy for duck hunters. Both the white-winged and black scoter is larger than the surf scoter.



Photo by Joe Rothrock

With its long, skinny tail, the long-tailed duck looks like a pintail at first glance. Nowhere near as abundant as the surf scoter, this sea duck shows up in sea duck hunters' bags throughout the season.

Although also found in freshwater, the goldeneye is actually considered a sea duck and is mostly found on saltwater during winter in Washington. There are two species of goldeneye that call Washington home. They are the Barrow's goldeneye and the common goldeneye. It can be difficult to tell hens of the two species apart. The Barrow's drake tends to be a little larger and has a larger white, half-moon-shaped spot between its eye and bill.

The drake harlequin duck ranks with the wood duck when it comes to striking coloration. Although rare, the harlequin is always a possibility for hunters along Washington's marine waterways.

Hunting Techniques

Sea ducks are hunted on salt water sloughs, channels, and large back bays. Hunting over decoys is how most of these ducks are hunted, with large decoy spreads in areas the birds like to feed. However, sometimes hunters can occasionally pass shoot ducks coming out of back water sloughs when heading to larger salt water bodies during tide changes.

Geese (including brant)

Geese (including brant) are the waterfowl hunter's big game. Washington hunting seasons for geese allow the harvest of several species and subspecies. Along with an abundance of birds, liberal seasons, and lots of hunting opportunity, goose hunting can be a real joy.

The Canada goose is Washington's most common and most popular goose species. Found on both sides of the Cascades, Canada geese provide exciting hunting opportunities throughout



Photo by Roy Murdock

the long fall and early winter season. Washington has several varieties of Canada geese that vary greatly in size, coloration, and abundance. Currently the dusky Canada goose season is closed. It is the hunter's responsibility to know the species of the bird he/she is trying to harvest and what birds are legal.

Large numbers of snow geese migrate into and through Washington from mid-fall through mid-winter and provide excellent shooting opportunity

in some areas. The largest numbers of snow geese are most notably in western Skagit and Snohomish counties. Adults are pure white with black wing tips, making them easily

identifiable. However, to the untrained hunter, swans may look similar to snow geese but are not legal to harvest in Washington.

Brant provide an exciting but limited hunting opportunity in the marine waters of Skagit and Pacific counties. Most brant of the west coast are darker than those on the east side of the country, and are commonly referred to as black brant. A smaller population of "gray-bellied" brant winter in Skagit County.

Hunting Techniques

Most geese are hunted over decoys. Generally when flying, most geese are too high to pass shoot unless it is early in the season or strong winds force them close to the ground. Hunters can jump shoot geese on some areas as long as they can be concealed until the last possible moment. Geese on larger fields may mean a long belly crawl to get into range.

General Waterfowl Hunting Techniques

There are three basic methods of hunting waterfowl: hunting over decoys, jump-shooting, and pass-shooting. It should be pointed out that there are virtually limitless numbers of variations and combinations of the three depending on the species and the minute-by-minute changes in circumstances that are an integral part of waterfowl hunting. Some excellent hunting technique resources are available online: http://www.deltawaterfowl.org/hunting/first_hunt/ and http://www.deltawaterfowl.org/hunting/first_hunt/ and

Hunting over decoys

Hunting ducks and geese over decoys is in some ways a much more complicated endeavor than jump-shooting or pass-shooting (described below), but, done right, it can also be very productive. The object of hunting over decoys is to wait for birds to come to the hunter. By placing decoys hunters have a hand in enticing waterfowl to come closer than they might otherwise. Please note that is illegal to hunt waterfowl aided by bait (grain, other feed, or salt that has been placed to attract birds).

As with all hunting methods, hunters must first find a place to hunt. They can choose a pond, slough, field, small bay, stretch of marine shoreline, or wherever research, scouting, and other information-gathering efforts would indicate birds are likely to be found. When hunting over decoys, the hunters need to be well-concealed, so a blind and an outer layer of camouflage from head to foot are usually a must, and that outer layer should be both waterproof and warm.

For duck and goose hunters, decoy location is usually going to make more difference than what kinds of decoys are put out. First and foremost, decoys must be visible from the air, so they need to be placed out in the open where they can be seen from as far away as possible. A dozen decoys crowded three feet apart into one corner of a 50-acre field will probably go unnoticed by passing birds, as will decoys lined up tight to the edge of a cattail patch or placed under overhanging trees and brush on one side of a small pond. Also, waterfowl land into the

wind, so it's important to place decoys with the wind at one's back so birds will come to the decoys in front to the hunter.

There are nearly as many opinions on the "right" way to lay out a spread of decoys as there are duck and goose hunters, but there are some general rules on which most hunters agree, and one of those rules is that there should be an open spot, or hole, among the decoys where there's room for incoming birds to attempt to land. Placing decoys in a "C" or a "J" formation, with the open side facing downwind, is one way to do it. Some hunters place three to four clumps of two or three decoys each to the right in front of the blind and three or four clumps to the left, leaving a large area of open water in the middle, straight out in front of the blind.

Goose hunters generally use large spreads of goose decoys in agricultural fields, but they can also be used to hunt geese in water.

As mentioned earlier, big-water hunters gunning for sea ducks and other diving species may use 100 or more decoys, and many of them like parallel strings or a J pattern decoy presentation. Unlike puddle-duck hunters whose decoys each have a separate anchor line and weight, bigwater duck hunters may string dozens of decoys on one line so it doesn't take hours to deploy and retrieve the decoys at the start and end of the day.

If the blind is on a slough, small stream, or side channel off a river, blocking the entire channel with decoys can be attempted. Flights of ducks on the main river often turn into the smaller feeder sloughs and channels when they see the decoys. If the channel is completely cut off, they'll often drop right in on the first pass. Place a few singles, pairs, and smaller groups of decoys downstream, along the edges of the channel, creating pinch points to funnel landing ducks toward your blind.

Jump-shooting

As the name implies, this method involves walking, crawling, or, in some cases, paddling or rowing to within shooting range of birds that are on the water or on the ground and flushing, or "jumping" them into the air. In other words, hunters are stalking the birds, not waiting for birds to come to them. How to go about stalking them, of course, is determined by the situation. Jump-shooting puddle ducks along a weedy slough or series of small ponds may be a matter of sneaking quietly from one cattail patch to another and shooting at singles or pairs of birds that rise within shooting range.

Jump-shooting a flock of 150 Canada geese on a recently harvested corn field may require a belly-crawl through mud to get close enough for a shot. If those geese wander too close to an open hillside and a hunter can get to the back side of the hill without being spotted, the best strategy may be to pop up at the top of the hill and shoot birds that are in range.

Jump-shooting isn't a simple matter of slogging along and shooting birds that happen to appear. Successful jump-shooting requires a certain amount of reconnaissance, strategy, and stealth. Hunters should scout the areas they plan to hunt, move slowly and quietly, look and

listen as far ahead as possible. They should also use the wind, weather, and available cover to their advantage Jump-shooters should assume that there are birds behind the next clump of cattails or around the next bend in the stream, so as to be ready to shoot when the time comes.

Pass-shooting

Rather than going to where the birds are resting or feeding, pass-shooters find a spot where they think ducks or geese will pass by and hunker down and wait for the birds to come to them. The key, of course, is to put yourself in the right place at the right time, or your pass-shooting efforts could lead to some very long and very boring days.

Luckily for hunters, ducks and geese are creatures of habit, and they tend to follow the same routine from day to day, season to season, year to year. That includes using the same travel routes between the places they roost at night and the places they feed during the day. The pass-shooter's primary challenge is to learn where those travel routes are and locate ambush points along the way. In some cases, the research has already been done, as there are well-known pass-shooting spots scattered throughout some of Washington's prime duck-hunting and goose-hunting areas.

Those traditional pass-shooting spots tend to be popular, and sometimes crowded, so hunters may want to find a few of their own. Start by figuring out where birds feed, where they rest, and what the routes might be between those areas. In some cases the feeding areas and roosting areas may be only a short distance apart, such as a large lake and a farm field a mile away. In other cases, the travel route may cover 10 miles of rolling hills between the Columbia River and distant corn or wheat fields. Locate a hill they pass over, a point they pass by, or a narrow valley they fly through on the way and there is a good chance of success. On the more wide-open east side of the state, hunters might be able to find a high point and scan the countryside for signs of low-flying birds in the distance, then zero in on those places that seem to be used frequently.

While the jump-shooter may kick up birds throughout the entire day, most of the action for pass-shooters is going to occur early in the day or late in the day. This is when ducks and geese are traveling from roosting areas to feeding areas and returning to their roosting spots. Put bluntly, that means it is best to be in position by the start of legal hunting hours and/or stay there until sunset.

Hunters should be invisible to the birds. Taking cover by rocks, bushes, or nearby trees help position the hunter so his/her silhouette is broken. A small blind built from limbs, brush, and other natural material is also a good way to get concealed from birds.

The key to pass shooting is to avoid the urge to shoot too high (sky-busting). This is an unethical and illegal practice because it can wound birds and also result in wastage of birds when they sail out of range to areas they are not retrievable.

Avian Influenza

Avian influenza ("bird flu") is a viral illness found in birds. Wild birds can carry a number of bird flu viruses, but most strains do not seriously affect them. Bird flu viruses are unlikely to infect people who practice good hygiene when handling birds.

Occasionally bird flu viruses evolve into forms that are deadly to domestic chickens and turkeys. These viruses are known as "highly pathogenic avian influenza" (HPAI) viruses, a designation that refers to their ability to cause disease in domestic poultry, not in humans or any other animals.

In 1996, a particularly virulent form of bird flu caused by a strain of virus known as Asian HPAI H5N1 sickened and killed birds in Asia, Africa and Europe. After close contact with infected domestic birds, more than 100 people in Asia died from this Asian HPAI H5N1 virus. This strain of HPAI has not been detected in North America.

Since then, several different bird flu strains have been identified around the world in domestic birds, including HPAI in poultry farms with chickens and turkeys in British Columbia, Canada. After the disease was detected at a B.C. poultry farm in fall 2014, the Washington State Department of Agriculture increased random testing among poultry flocks in areas near the border with Canada and alerted veterinarians and bird owners around the state.

This heightened awareness led to a report in December 2014 of a gyrfalcon in northwest Washington that died after eating a wild duck. The gyrfalcon, which was legally used for hunting by a Whatcom County falconer was tested and confirmed to have HPAI. In addition, a northern pintail duck that was part of a group of waterfowl that died of aspergillosis (an unrelated fungal infection) near Wiser Lake in Whatcom County tested positive for carrying the HPAI bird flu virus.

Since that time, HPAI strains have spread quickly in the Pacific Flyway and other flyways. They have been found in backyard poultry flocks, commercial poultry, wild waterfowl, and wild and captive raptors (hawks, falcons, etc.). None of the HPAI strains circulating in North America have been identified as risks to human health.

Because of the potential effects of the new strains on wild raptors, WDFW is asking bird hunters to not dispose of processed carcasses in the field where they could be eaten by raptors. Instead, carcasses should be bagged and placed in the garbage, buried or incinerated. It is also highly recommended that hunters who have domestic poultry or other birds at home, or who may visit domestic poultry markets or exhibitions (such as fairs), take special precautions to ensure that all equipment (boots, clothes, vehicles, etc.) are cleaned and disinfected to prevent the spread of diseases.

Bird flu viruses are transmitted among birds through respiratory secretions and fecal droppings. The virus is not easily transmissible from birds to people, but health officials are concerned that

without proper hygiene, it could develop into another form that spreads readily from person to person. While it is extremely unlikely that hunters or people feeding wild birds could contract bird flu from wild birds, the following common-sense precautions are always recommended to reduce the risk of contracting any wildlife disease:

- Do not harvest or handle wild birds that are obviously sick or found dead.
- Wear disposable gloves while cleaning game or cleaning bird feeders.
- Do not eat, drink or smoke while cleaning game.
- Wash hands with soap and water or alcohol wipes immediately after handling game or cleaning bird feeders.
- Wash tools and work surfaces used to clean game birds with soap and water, then disinfect with a 10 percent solution of chlorine bleach.
- Separate raw meat, and anything it touches, from cooked or ready-to-eat foods to avoid contamination.
- Cook game birds thoroughly. Meat should reach an internal temperature of 155 to 165 degrees Fahrenheit to kill disease organisms and parasites.

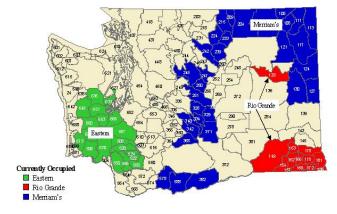
Dogs used in wild bird hunting are considered to have a low risk of acquiring bird flu. There have been reports of one dog and several cats acquiring the Asian H5N1 strain of bird flu in other parts of the world, but no dogs or cats have been documented with the currently circulating HPAI strains in North America. Dog and cat owners should consult their veterinarian for more information about influenza in pets.

WDFW has been collaborating for the past several years with the National Wildlife Health Center, the U.S. Fish and Wildlife Service (USFWS) and the U.S. Department of Agriculture (USDA) in a nationwide surveillance effort for early detection of highly pathogenic avian influenza in wild birds. From 2005-2011, WDFW tested over 10,000 wild birds for bird flu viruses. Bird flu viruses were found in about 10 percent of all birds tested, but none were associated with any illnesses or mortality.

Turkey

Washington State is home to three sub-species of turkey: the Eastern, Merriam's, and Rio

Grande. In 1960, Merriam's turkeys were introduced into NE and south central Washington State for hunting purposes. Since then, WDFW has introduced Eastern and Rio Grande sub-species to other suitable parts of the state. Turkeys now can be found in five of the six regions recognized by WDFW. Region 4 is the only area that currently does not have turkeys. To the right is a map of the turkey distribution in Washington.



Eastern

The eastern subspecies was transplanted to Washington from the eastern United States. These turkeys like to live in forests with a mix of evergreen and deciduous trees. The trees they like to



Photo by National Wild Turkey
Federation

use are Douglas fir, western hemlock, western red cedar, red alder, and big leaf maple. They also like to eat the soft mast of Pacific dogwood, hawthorn, Oregon grapes, huckleberries, blackberries, cherries, and crab apples. The Eastern wild turkey is found in western Washington and only about 50 are harvested each year.

- Chestnut brown tail coverts
- Tail feather tips are buff or chocolate brown
- Adults may weigh 25 lbs. or more.

Merriam's

Merriam turkeys are native to the coniferous mountains and canyons of Colorado, New Mexico, and Arizona. They live in the canyons and forests of northeast and central Washington. These turkeys prefer forests that contain ponderosa pine, Douglas fir, western white pine, Engelman spruce, Douglas maple, willows, cottonwoods, and aspens. In Washington, they eat grass leaves and seeds, ponderosa pine seeds, acorns, grasshoppers, forbs, and fruits like wild strawberries. Also, they prefer to roost in Douglas fir and grand fir trees.

- White or buff tail coverts
- Nearly white tail tips
- May weigh up to 25 lbs.



Photo by WDFW



Photo by National Wild Turkey Federation

Rio Grande

Texas, Kansas, and Oklahoma are the native stomping grounds for the Rio Grande turkey. These are the only species in Washington that prefers to nest within .25 miles of a permanent water source. Their winter roost sites are normally in wooded streamside areas. They eat insects, grass and sedge seed heads, hackberry, prickly pear, fruit and seeds of various shrubs, and the foliage and forbs of grasses. The Rio Grande turkey is found from Spokane and Lincoln counties south into the Blue Mountains of Washington.

- Light brown tail coverts
- Buff/tan tail tips
- Legs appear longer than other varieties

Hunting Techniques

Most turkey hunting is done in the spring when male turkeys (toms) are displaying to female turkeys (hens) in a bid to become their mate. The great thing about spring hunting is that the birds are generally vocal and respond to calls and decoys. In Washington you can harvest up to three turkeys during the spring season.

Fall hunting is a bit different than spring hunting because the birds are gathering for the upcoming winter months. They are generally just feeding and moving throughout the day. Hunters can harvest up to four turkeys during the general fall seasons. An additional bird can also be harvested during the fall special permit season if you put in for and are drawn for a special permit.

Spring Hunting

Spring turkey season is a great way to get outdoors after a long winter. You can use a locator call to determine if there are toms or jakes (immature tom) in an area. Often toms will respond with a shock gobble to any loud, sudden noise. Once the season opens, use locator calls or hen yelps to locate a tom. When you get a response, set up your blind or find a location to easily conceal yourself. Look for meadows or small openings in areas with a lot of food. It is recommended to sit with your back to a tree, stump, or hill side to protect you from another hunter and help with camouflaging you. If you have a decoy, try to place it about 20 yards from where you will be sitting. Once you are set up, use your turkey call to draw in the birds. Generally, hunters use hen yelps, clucks, and purrs to draw in toms.



Photo by Brad Johansson

Fall Hunting

Hunting turkey during the fall is similar to hunting deer. Turkeys are generally in larger flocks made up of hens and their offspring or smaller groups of toms. Look for travel corridors and feeding areas that the birds are using. Set up an ambush point on travel routs between the roost tree and the feeding area. Set up similar to the spring hunting information above. Sometimes you can coax hens closer to your ambush point by using some soft hen calls and juvenile turkey 'kee kees'. Listen to the birds and imitate the calls they are making.

General Turkey Information Food and Feeding Habits

Wild turkeys will eat just about anything that provides them with nutrition. They will eat fresh green vegetation, seeds, fruit, invertebrates, plants, and sometimes small lizards or frogs. A

field full of grasshoppers in turkey country is sure to attract birds. Turkeys feed right after flying down from the roost in the early morning and in the evening.



Photo by Andy Arthur

Tracks

Turkey tracks can be found in snow, soft mud, or light dirt areas. Their track is very distinctive. It is about four inches long, characterized by three long toes that face forward, and one little toe that faces back, about one inch. The middle toe of the hen is smaller (less than 2 ½ inches) than a mature tom (more than 2 ½ inches). When strutting, toms will also leave wing drag marks.

Droppings

Turkey droppings somewhat resemble goose droppings and can be useful in determining the gender of the bird who left it behind. They are similar in size but not always in color. Hen droppings are usually a single pile while a tom usually leaves an elongated "J" shaped dropping about two inches long. Finding droppings may signify that this area is being used by turkeys. But it also may mean that they just passed through. Try a locator call or soft clucks and yelps if you find a lot of droppings to see if there are turkeys in the area. If you find a lot of droppings below a tree, you may have found the roost tree. Make sure to take note of where the tree is so you can use the knowledge to your advantage.



Hen Droppings Photo by Rich Mann



Tom Droppings Photo by Rich Mann

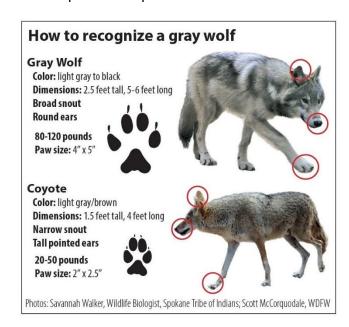
Roosting Areas

Turkeys generally roost in trees. However, during nesting season, some hens may stay on the nest to protect the eggs. During the summer, most roost areas are 30-100 foot trees that are close to where the birds have been feeding. Winter roosts seem to be more deliberate and the turkeys generally use traditional night time roosts. They like to use the largest trees in a grove and tend to roost as near to the top of the tree as comfortably possible. Hunting birds at the roost site may disrupt normal patterns and is not recommended. Set up about 70 or more yards from a roost site and call the birds to you when hunting.

Unclassified Wildlife

In Washington, there are approximately 22 mid-to-small sized mammals or mammal groups that can be hunted. Of the 22, five species are classified as game species. The remaining species or species groups are "unclassified," and can be trapped or hunted year-around. They also have very little hunting pressure, meaning there is no bag limit on unclassified animals. These species can be hunted year round with either a big game license or a small game license are:

- Mountain beaver
- Coyote
- European rabbit
- Mice
- Moles
- Nutria
- Virginia opossum
- Porcupine
- Rats
- Shrews
- Spotted skunk
- Striped skunk
- Voles
- Yellow bellied marmot
- Gophers (except Mazama pocket gophers are protected and cannot be hunted)
- Gray squirrels and fox squirrels (except western gray squirrels are protected and cannot be hunted or trapped)
- Ground squirrels (except golden-mantled ground squirrels and Washington ground squirrels are protected and cannot be hunted)



As can be seen from above, there are certain animals within classifications that are protected and cannot be hunted. Hunters who are going to hunt those species that are very similar to the protected species need to be VERY sure of the species before harvesting. The worst cases of mistaken identity would be shooting a wolf one thought was a coyote or shooting a grizzly thinking it was a black bear. To the left is an identification tool for wolf and coyote and in the bear section was an identification tool for black and grizzly bears.

While hunters need to be aware of the species classifications, hunting unclassified animals can be a great way to get introduced to the sport since there is very little pressure, the animals are plentiful, and it is fairly inexpensive to hunt them.

Hunting Equipment

Legal hunting equipment is as diverse as the companies that create and sell them. There are huge books that have been written about all the different types of firearms and archery equipment and what their uses are. Below is information about each hunting equipment type. For current hunting equipment regulations please see the current regulation pamphlet(s).

Big game animals can be hunted with archery, muzzleloader, or modern firearm hunting equipment as long as they meet the below qualifications. The hunting seasons for deer and elk are broken down by equipment choice. Hunters must choose a "weapon type" to hunt deer or elk and are locked into that season. Making hunters choose their season and equipment helps prevent overcrowding during the hunting season. WDFW sets the season length based on harvest rates and seasonal animal surplus projections.

A hunter who chooses archery can only use archery equipment during the archery season. Muzzleloader season tag holders can use archery or muzzleloader equipment during muzzleloader season. Those hunters who choose modern firearm can use archery, muzzleloader, or modern firearm equipment during the modern firearm season. Remember that hunters may only hunt in the season that matches their tag.

Upland birds and waterfowl are generally hunted with shotguns and muzzleloading shotguns. Archery equipment is legal to use as well, however the skills needed to be successful doing this are extremely difficult to develop. Also, any hunters using archery equipment when hunting upland birds or waterfowl will need to be very aware of other activities within the general vicinity since their arrows could fly long distances.

Legal hunting equipment for turkey hunting is limited to shotgun, muzzleloading shotgun, archery, or crossbow in Washington.

Below are some suggestions and information on the different hunting equipment that you may need when hunting in Washington. These are just suggestions and hunters will need to find what works for them.

Archery equipment

Bows can generally be placed in one of two categories, compound or traditional. Compound bows are the most popular hunting bow because of their ease of use. The mechanics of the bow allow the shooter to more easily draw and hold than the traditional bows. Compounds have what is called "let off." At a certain point in the draw, the draw weight is reduced by as much as 85%. These bows are always strung and ready to go.

Traditional bows are either long bows or recurve bows. There is no mechanical let off when holding these bows at full draw. However, these bows are just as effective at harvesting animals as compound bows (if the archer is proficient with them). These bows have to be strung before use because if they are kept strung, they would lose power by forming to the strung position.

There are several types of arrows available for hunters, generally constructed of



Photo by Melissa Yeisley

wood, aluminum, or carbon fiber. Archers should refer to the manufacturer's table to determine which arrow type and size fit their bow and shooting conditions best. A reputable archery retailer can provide assistance to determine which arrows to purchase for any given bow.

Broadheads need to be used when hunting big game with archery equipment. These also come



Photo by Jack Fowler

in many different shapes and sizes. Broadheads used for hunting should be the same weight as the field points that are being used for target practice.

Crossbows can be used in archery season IF the hunter is disabled and has been approved for a special use permit through WDFW's ADA program. Please see the crossbow information within the Modern Firearm Equipment section since it is considered a modern firearm in regards to hunting in Washington.

Muzzleloader equipment

Muzzleloaders are a great way to hunt with a method that has been around for hundreds of years with the ability to shoot to distances of 100 yards or more. This equipment type is the least utilized by hunters in Washington state, but it may be because they are unaware of how accurate and fun muzzleloader hunting can be. The good news is those who choose to become a muzzleloader hunter will find the woods are less crowded as there are not nearly as many muzzleloader hunters as there are for archery or modern firearm deer seasons.



Photo by Taiton Gillespie

Currently any projectile fired from a muzzleloader is legal as long as it meets the caliber restrictions. This is good news because of the advancements in projectiles can help with accuracy and lethality. The novice muzzleloader hunter should explore these new projectile options to determine the right combination for his/her rifle. In addition, smooth barreled muzzleloaders can shoot buckshot as long as it meets the current regulation requirements.

Muzzleloading firearms can only use a black powder or black powder substitute that is rated for the muzzleloader. Using the incorrect powder in a muzzleloader could be disastrous.



Photo by Krista Magnussen

Some other helpful safety hints include:

- Never fill the muzzleloader directly from the powder can as it could spark and ignite the powder in the can.
- Mark the ramrod when the muzzleloader is empty so you can make sure it is empty upon storage.
- Be sure to seat the wad and shot directly on top of the powder charge.
- Store powder and percussion caps in separate dry and cool places.

Beware of a hang fire. This happens when the trigger is pulled, the percussion cap ignites, but the firearm may not go off. Make sure to keep the muzzle pointed in a safe direction for at least 30 seconds. If it still does not fire in

that 30 seconds, put on another cap or re-prime the pan, and fire again. Make sure the nipple is clean on percussion locks.

Modern Firearm Equipment

Modern firearm seasons are the most popular deer hunting seasons in Washington. This may have to do with the ability of modern rifles to be able to shoot very accurately at very long distances or because the timing of the season is closer to the deer rut. Several different types of hunting equipment are classified as modern firearm equipment. They are Rifle, Pistol, Shotgun, and Crossbow.

So many rifle calibers available will work for deer hunting it can be overwhelming. Some of the more popular hunting calibers for big game like deer and elk are .243, .270, 7mm



Photo by Gerry Loney

mag, .308, 30-06, and any of the .300 magnums. These rifles and ammunition are generally available at most sporting goods stores since they are so popular. Animals are harvested by proper shot placement into the vitals, so the best deer rifle for a hunter is one that he/she can shoot accurately and safely with confidence.



Photo by Cody Pecor

Rifles can fire many different bullets that have different weights and are made from different materials. The weight of a bullet is measured in grains. The more the bullet weighs, the more energy is transferred to the target. For deer hunting, a bullet that is 100-150 grains and will mushroom or peel on impact is desirable. Those hunters who are planning on hunting elk as well may want to move up to a 180 or larger grain bullet. A bullet's makeup and design will cause it to act differently when striking a target. For example, a bullet that has a polymer tip may be designed to mushroom faster and wider than a bullet with a lead tip. Many ammunition manufacturers are producing factory ammunition loaded with all copper bullets designed for big game

hunting; these bullets perform well and have gained popularity in the big game hunting fields. When hunting for big game animals, like deer, hunters want a bullet that expends its energy into the target.

While hunting with a handgun is legal, it is not as popular as other methods. Hunters choosing this firearm for big game hunting must choose a bullet that is effective for the job it's expected to perform. The handgun bullet needs to be able to deform enough to cause a humane harvest of the animal.

Shotgun hunting for big game is generally done within firearm restriction areas. Some shotgun manufacturers do make rifled barrels that provide increased accuracy when using rifled slugs. However, firing shot out of a rifled barrel could damage the rifling. Buckshot from a smooth shotgun barrel can also be effective. Hunters should check with choke manufacturers before shooting buckshot out of a full or an extra full choke.

Crossbows were made legal to hunt with as a modern firearm in 2015. The crossbow is gaining popularity amongst hunters because of its accuracy and speed. They are also as quiet as a bow when fired.

Modern Firearm Equipment – Birds

Shotguns

Shotguns are the most widely used hunting equipment when hunting upland birds, waterfowl, and turkey. Any shotgun can make a good bird gun as long as it shoots straight. The choke helps group the shot together. Some shotguns have interchangeable choke tubes and a threaded barrel that allows shooters to change their shotgun's choke based on their needs for shooting/hunting. Generally, bird hunters want a shotgun that has a choke that is improved cylinder or modified when hunting upland birds or



Photo by Jerry Lemke

waterfowl. Turkeys are usually hunted with a full or extra full choke to maximize the distance one can shoot.

Bird	Lead Shot	Nontoxic Shot
Pheasant	4-6	2-4
Quail	7½-8	6-7
Chukar	4-6	4-6
Gray Partridge	4-6	4-6
Large Ducks	N/A	2-4
Small Ducks	N/A	4-6
Geese	N/A	T-BB
Turkey	4-6	4-6

It is unlawful to hunt game birds, including turkey, with a shotgun capable of holding more than three shells. If it is designed to hold more than three, the manufacturer

should have also supplied a magazine plug to fill the space to only allow the three rounds.

Depending on the birds that are being hunted, hunters will want to look at different shot sizes and loads. Remember that #6 shot is smaller than #4 shot. Hunters may also want to think about shot composition since hunters are required to use non-toxic shot on all pheasant release sites. Hunters should check with choke manufacturers before shooting non-toxic shot out of their choke.

Muzzleloading shotguns, archery equipment, and crossbow equipment are legal to hunt birds although it is very difficult to harvest birds with archery equipment.

Nontoxic ammunition

Historically, almost if not all firearm projectiles (shot or bullets) were made from lead. Lead is toxic when ingested; however, lead poisoning is entirely preventable. When an animal or human ingests lead, it is distributed to the brain, liver, kidneys, and bones. Exposure of lead to pregnant women can cause miscarriage, stillbirth, premature birth, and low birth weight.

WDFW is not transitioning to nontoxic ammunition nor planning to require nontoxic ammunition be used in more areas than it already is. Any change to existing regulations on lead ammunition would have to go through the Fish and Wildlife Commission for approval.

Shot

There are nontoxic shot types approved for use in Washington when required. The approved shot types are detailed in the Washington State Migratory Waterfowl and Upland Game Seasons pamphlet.

Nontoxic shot can be as lethal as lead shot if used appropriately. The general rule of thumb is to increase the shot size when going from lead to nontoxic. For example, hunters would increase the size of shot if switching to nontoxic shot from size 4 lead to size 2 steel. Tom Roster's lethality chart that is printed in the Washington State Migratory Waterfowl & Upland Game Seasons pamphlet offers suggestions for size of nontoxic shot for game birds.

Waterfowl and upland bird hunters can save money by buying ammunition in bulk that will work for both waterfowl and upland bird hunting. Making bulk purchases will generally decrease costs. Also, steel shot is not that much more expensive than lead shot.

Bullets

Lead bullets for hunting are designed to penetrate and expand. However sometimes on impact the bullet will fragment into tiny little shards. These shards are then found throughout the body of the game animal. Manufacturers are now designing and selling more non-toxic rifle ammunition. Full copper rounds are designed to peel and retain their weight. The peeling of the copper bullet expends its energy into the target.



Photo by Bill Vogel

Copper rounds can be purchased preloaded or hunters can purchase copper bullets from a manufacturer and load their own. The copper rounds weigh a little less that the same size lead bullet, so in general the copper rounds are a bit larger. When copper rounds are retrieved after shooting, they weigh essentially the same as when they were loaded.

Clothing and Concealment

In hunting as in everything else, if people who are outdoors are not comfortable they won't enjoy their experiences as much as if they were comfortable. Below are some suggestions on choosing clothing, vests, blinds, and tree stands. Finding what works for each individual is the key.

Boots

Hunting boots will help support ankles and also keep feet dry and warm. Wet and/or cold feet when hunting can make for an uncomfortable day. Some boots have insulation in them to help combat the cold. When choosing a boot, think about the kinds of hunting you will be doing and the temperatures in which you will be hunting. Those who primarily hunt eastern Washington may want to get the boots with 2000 grams of insulation to help on those frigid mornings.

Layering

When dressing for any hunt, hunters want to make sure to take into consideration the kind of activity they will be engaged in. Dressing in layers will allow hunters to regulate their body temperature more efficiently. The idea is to wear only the layers that are needed to stay warm and dry at the time, but have the option to take a layer off or put another layer on if conditions change. In cool weather, for instance, it's desirable to wear fewer layers to hike up a steep incline, but at the crest of the hill and while sitting for a while, there's the option of adding more layers. A tough pair of cotton jeans or wool brush pants also may be a good idea to help protect legs when working in brush as well as keeping the hunter warm and dry.

Camouflage

In some hunting situations, hunters can wear camouflage clothing to help conceal themselves from animals. The number of camouflage patterns and manufacturers is dizzying. Just remember to try to match a pattern with the kind of habitat and climate you are going to hunt. Several of the bigger camo pattern companies have all purpose patterns that will work in many different locations which is advantageous if hunting in different environments. If all else fails, hunters can use the old style of green, brown, and black camo that is common in popular culture. It is also important to camouflage the face and hands when using camouflage.



Photo by Tom Frank

The basic idea of camo clothing is to break up the outline of the human silhouette and allow hunters to blend into the habitat. Animals are instinctively afraid of humans and if they see a human shape approaching, they're generally going to leave the area before the hunter has a chance to harvest them.

Sometimes wearing no camo is better than wearing a contrasting camo pattern. Those who are hunting the desert and are wearing a cattail camo designed for waterfowl hunting will stick out like a sore thumb. Wearing clothing that is similar in color and pattern to the surrounding country is critical.

Also, because the weather in the Pacific Northwest is generally wet, having warm waterproof camouflage clothing can increase one's comfort level and improve the experience. Waders are also a good purchase for hunting waterfowl because they are completely waterproof and will help the hunter stay warm and dry when placing and retrieving decoys. The downside to hunting in waders is that they may get punctured when wading in water that contains objects, such as sticks and barbed wire fencing, which can pierce the wader. Wearing a pair of camouflage pants that are a couple sizes too big outside of waders can help protect the hunter from possibly getting a cold bath when hunting waterfowl.

Hunter Orange

Hunter orange is required to be worn in some hunting situations. Check the regulations for current requirements. The hunter orange clothing has to be at least 400 square inches, be above the waist, and be visible. A hat by itself will not satisfy the requirement. Hunters are recommended to wear as much hunter orange as possible to help other hunters see them when in the field.

Generally, upland hunters prefer their hunter orange in a vest which contains pockets for storing shells, first aid kits, water bottles, ear plugs, etc. Some vests also have a game pocket that is great for holding harvested birds so the hunter's hands are free to continue to hunt until their limit is reached. To maximize use of the hunter orange, hunters may just decide to purchase an upland bird vest to use for all hunting that requires hunter orange. In addition to the vest, hunter orange hats are also recommended when hunting in tall cover such as tall grass or alpine forest because they are visible over the tall cover and increase the chances being seen by other hunters.

Turkey vest

Some hunters also choose to purchase a turkey vest. This tool will help carry gear into the turkey woods more easily. These vests also generally have a foam seat to help make hunters comfortable when sitting for long periods.

Blinds

Most game animals have outstanding vision. When stand hunting, minimizing movement and being totally concealed is the key. Ground blinds are becoming more and more popular.

Commercial ground blinds are designed to pop up and provide total concealment on the ground. Just popping this blind up does not guarantee concealment, so brush and cover can be placed around the blind to help conceal it, and keeping the windows in the back zipped up helps hide the hunter's silhouette. If ground blinds are set out in advance of the hunt, game can become accustom to the blind. Layout blinds or hay bale blinds are also used when hunting waterfowl in open fields.

Blinds can also be constructed with burlap, $1 \times 1s$, spray-paint, and some string. Cut the $1 \times 1s$ to about a four foot section. Drill holes in the $1 \times 1s$ and lace the burlap to them. Spray paint the wood to be a dark color and put streaks of green, black, and tan on the burlap. This is an easy blind to construct and transport.

Depending on the surroundings, hunters may be able to fashion a very functional blind from available materials such as tree limbs, grass, cattails, or sagebrush. It's a good idea to "brush up" any blind with whatever natural vegetation occurs at the site being hunted.

Where the blind is built or placed may be as important as how it looks and how well it conceals. As a general rule it's best for the blind to be situated with the wind in the face of the hunter for all game except waterfowl. For waterfowl the wind should be at the hunters back since ducks and geese, like 747 pilots, prefer to land and take off into the wind. Winds here in the Pacific Northwest are generally out of the west and southwest. If you are not sure of the wind direction, there are wind indicators that can be purchased from sporting goods stores. One of the most used is powder in a squeeze bottle that will create a puff of smoke and drift with the wind. Another tried and true method is to pick up some dry grass and drop it from about eye height, and it should give an indication of the wind direction.

Hunters should remember to obtain permission from the landowner prior to placing ground blinds or tree stands. On public land, hunters should check the regulations of the agency that owns the land.

Tree stands

Tree stands are gaining popularity with hunters here in the Pacific Northwest. These devices attach to a tree to bring hunters up from ground level and provide a bird's eye view of the landscape. Some tree stands require the use of a ladder to place it on a tree, but others are called climbing tree stands because they allow the hunter to climb the tree. When using a tree stand, remember to ALWAYS wear and use a safety harness as hunters can easily fall from a tree and sustain serious injury.

Optics

High quality optics, especially binoculars, may be one of the most useful pieces of equipment hunters can have in their hunting toolbox. These pieces of equipment can be a great asset in locating and harvesting game animals. Not only do optics allow hunters to search vast stretches of habitat without having to hike, they will also allow hunters to verify if the animal is legal

before harvesting. Hunters should NEVER use a rifle scope to glass a hunting area because it could be a safety issue. If there was an accidental discharge when glassing with a rifle, a hunter could harvest an animal that is not legal, harvest an animal that is not a game animal, or kill a fellow hunter.

All optics have a numerical designation such as 8 x 42. These numbers correspond to the construction, the first being magnification. In the 8 x 42 example, the image is magnified eight times. The second number is the diameter of the objective lens of the optic. In the 8 x 42 example, the objective lens is 42mm wide. The higher the objective lens, the bulkier the optic.



Photo by WDFW

However, the larger the objective lens, the clearer the image will be, due to more light entering. Hunters are encouraged to go into a sporting goods store and test some of the optics before deciding on a specific size or model.

With regards to optics, consumers get what they pay for. A cheap pair of binoculars may work, but they may not last for very long or they likely won't work under the adverse conditions that are often encountered when hunting. If a hunter is going to spend a serious amount of money on any one piece of equipment, it should probably be a reliable and durable set of optics. Another justification for making such a purchase is they can be used on vacations and/or for wildlife viewing at other times of the year by all family members.

Generally, hunters do not need a spotting scope or binoculars for hunting waterfowl, turkey, or upland birds. However, they are helpful to identify waterfowl species, locate birds, observe their movements, identify their roost, or watch them go to their feeding locations.

Knives

There are about as many knives available in today's sporting goods stores as there are people to buy them. They are manufactured for many different uses and come in a variety of shapes, designs, and materials. One thing to keep in mind is a sharp knife is a good knife. Some knives are designed specifically for different jobs. When picking a knife, hunters will want to find something that works for them. It is recommended that hunters keep a knife sharpener on hand for touching up the blade when needed. Hunters may also want to have a bone saw because it will help when field dressing big game by cutting through the pelvis. In general, any knife can be used to field dress and process game animals; however, the knife that is designed specifically for a task will be better at that task then one that is not designed for the task.

Skinning knives have a deep belly in the blade to make skinning easier and to make it more difficult to put the tip of the knife through the hide. Some of these knives also come with a

hook, commonly referred to as a gut hook that is designed to be used to easily cut open the abdominal cavity of big game animals to remove the entrails.



Photo by WDFW

Boning knives are straighter knives with a thinner blade and are designed to cut the meat from the bone. This process is called deboning.



Photo by WDFW

Caping knives are shorter blades that are used to remove the skin from a big game animals head region. They allow for more fine detail work so a hunter can have the animal mounted.



Photo by WDFW

Bone saws generally have small sharp teeth constructed closely together found on a stiff, durable blade that most often tapers to a point



Photo by WDFW

Dogs

When hunting upland birds, a dog will make a world of difference. Hunters have their personal favorite breed for hunting and they all have their merits. This being said, any dog is better than no dog. They all have a nose that is better than humans at scenting game and are faster than humans at the bird's level. Bird hunters will want to make sure that the dog has gone through

obedience training well enough to follow essential commands such as, "come, heel, sit, stop." Also it is a good idea to start field training dogs early with loud noises to get them used to it. There have been dogs that are great at finding birds, but as soon as the hunter shoots, the dog runs off, hopefully toward the vehicle.

Just as humans need water and fuel when exercising, the hunter needs to have ample snacks and water for the dog. They cover much more ground than a hunter and will need some food and water throughout the day. Also, a dog can become quite fanatical about hunting and suffer injuries in the field, like cuts, scrapes, bruises, etc. It's advisable to consider booties for dogs that will be trekking across sharp rocks and have a first aid kit to treat an injured canine. To most waterfowl hunters, their dog is not only a great help in retrieving downed birds, but an eager and loyal hunting partner that stays by his/her side through the worst of conditions and the longest lulls in shooting, with never a complaint or loss of enthusiasm.

It's impossible to estimate how many dead and crippled game birds would be lost every year if it weren't for the hundreds of thousands of hard-working dogs that accompany their masters throughout the hunting season.

Waterfowl often drop into deep water, thick cover, or far away from the hunters who shoot them. Without a boat, downed birds would be impossible to retrieve were it not for the hunter's dog. To most hunters, a dog pays for itself every time it retrieves a bird that would otherwise be lost. Hunters that don't have a retrieving dog shouldn't hunt anywhere that they can't wade or boat to retrieve game birds. It is illegal to hunt turkey or big game animals with dogs.

Calls

Calls can be extremely effective at locating and bringing in game animals. Generally upland bird hunters do not use calls because they are roaming the fields for the birds already and are not trying to bring the birds to them. Below is a description of calls and how they are used to attract popular game species found in Washington.

It is illegal to hunt some game animals with the use or aid of electronic calls and battery powered or other electronic devices as decoys. Refer to the current regulations for the current rules.

Deer Calls

Calls have generally not been used extensively for deer hunting in Washington. However, the use of calls or other sounds associated with deer are gaining popularity in Washington and in other areas of the country. A less well-known or utilized calling technique is rattling and grunting to simulate two bucks fighting over a doe in estrus. The rattling technique is more common with Midwest and eastern white-tailed deer hunters, but can be effective, particularly during the pre-rut period or where buck to doe ratios are high. Also a grunt tube can be used to

signify that a buck is challenging the dominant buck. A doe in estrus call can also be effective during and near the rut.

Grunt tube – This call produces a grunting noise that dominant bucks use to let other bucks know who is in the area. This can be used in association with rattling calls for maximum effectiveness.

Rattling Calls – These calls are used to imitate two bucks fighting over a receptive doe. This is great to use in conjunction with the grunt call. This method of calling is used very extensively in the mid-west, but is also effective in calling in deer in Washington as well.

Doe Bleat – This call mimics a doe in heat call which is an attractant to bucks during the rut. Bucks are drawn to this call because this noise indicates that a doe is receptive, and it is often used where the buck to doe ratio is elevated.

Elk Calls

Elk calls are extensively used when elk hunting in Washington, especially by Photo by WDFW archery and muzzleloader hunters who have hunting seasons when elk are in the rut. Although all elk make some noises to talk to others in the herd, the bull bugle is one of the most recognizable calls in the woods. Used to locate bull elk, it is a challenge to other bulls in the area that is often answered by repeated bugling from one or more elk. When used effectively, the hunter can literally talk an elk to within twenty or thirty feet of the hunter.

Another call that is used frequently is the cow call. This call is generally used to bring bulls into range once they have been located. It is also effective in calming a herd down if they are starting to get spooked by your presence. It may make them think that you are just another elk. Calf calls are similar to cow calls but higher pitched and can be used as locator calls for cows. Caution should be used not to make too quick a cow call because the "bark" of an elk is a sign that danger is close and will put the herd on alert.

All of the below calls need air to make the call work. The push call has its own air pocket and moves air when pressed. The other three require a human to create the air movement to make the call function properly.



Push Call – These calls are used by pushing a plunger or air sack to give the required air movement over the reed and are great at making cow and calf calls. The push call is great for beginners because the call makes the correct sound when the plunger is depressed.

Photo by WDFW

Diaphragm call - This is the most difficult of the elk calls to master. The diaphragm call can be frustrating to learn since it requires a device inserted in the mouth with just the right amount of air flowing across the diaphragm to simulate elk calls. The

diaphragm call can be used hands free which allows the hunter access to binoculars or to ready for a shot. This call requires a lot of practice to become proficient.



Photo by WDFW

Bugle Tube – The sounds that this call produces mimics a bugling bull and is a great call to use when trying to locate the herd. Generally, a bull will respond to the call if he feels like a challenging bull might try to take his cows. This call can come with or without a diaphragm reed.

Cow call – This call is a mouth

operated device that is used to mimic cow and calf calls. These generally have a reed similar to a duck call and are used by putting your mouth over the reed and blowing gently.



Photo by WDFW

Turkey Calls

There are many types of calls that can be used for turkey hunting which generally fall into two types – friction and air operated calls. Most calls are used to simulate the calls of a hen turkey although a couple of calls do imitate the gobbling of a mature tom. However, these calls can also bring in other hunters looking to harvest a mature tom and should be used sparingly. Practice makes perfect when using these calls. Take some time, read the directions from the manufacturer, and practice calling well before hunting season begins. Below are some of the calls that are used for calling turkeys.

Photo by WDFW

Friction calls

Pot and peg call - These calls are also sometimes called slate calls due to the materials traditionally used to construct the striking surface. However, many more materials are being used and produce the same great sound. The call works by causing friction between the striker (the

pen looking stick) and the face of the call.

Box call - The box call is aptly named as it is basically a box with a movable lid to make the sounds. Calls are made by putting pressure on the lid and drawing it against the edges of the box.



Photo by WDFW

Push button call - These calls are very easy to operate but sometimes do not give the hunter the versatility

of a slate call or box call. Push button calls are generally mounted on the shotgun or crossbow and used for the last few calls. It makes a yelping sound which can cause the turkey to pause and give the hunters their shot.

Air Operated Calls

Diaphragm call - This is the most difficult of the calls to master. Since this device is inserted in the mouth to call, it can be very frustrating to learn. This method frees the hunter's hands up to do other things while calling, such as aiming at a strutting tom. This call requires an extensive amount of practice to become proficient. One trick to becoming proficient is to practice well before the season.



Locator call - Hunters might have seen crow, owl, hawk, or even peacock calls on the shelves in the sporting goods stores and wondered who in the world is hunting those birds. These are known as locator calls. During the spring months, tom turkeys will gobble at just about any loud, sudden sound. Using a locator call will help locate the turkeys so a hunter can begin to formulate a hunting strategy without bringing the birds to hunter's location.

Photo by Rich Mann

Wingbone call - The wingbone was traditionally made from the wing bones of the turkey. There are commercially available calls made from plastic materials as well. This call makes yelps and clucks but can be difficult to operate without the proper practice. It does require the hunter to use their mouth to make the call, but does not offer the hands free calling that the diaphragm call offers.



Photo by Rich Mann

Gobble tube

This call is shaken to produce gobbling type sounds. It can be effective for challenging and bringing in mature toms, but can also call in other hunters.



Photo by WDFW

Duck and goose calls

There's a duck or goose call for virtually every species and hunting situation, but the first time waterfowl hunter is well advised to research before buying and practicing frequently after making a purchase. Someone who knows how to use a duck or goose call can work miracles when it comes to drawing birds into shooting range. A bad caller, on the other hand, can chase them off even faster.

Calls can be a very effective tool for the duck or goose hunter, but it is critical to learn to use them BEFORE taking to the field. Hunters are advised to follow the manufacturer's directions and attend a calling seminar at

a local sporting goods store or hunting club. A number of audio and video CDs provide very good instruction on calling all species of waterfowl. Hunters can practice along with the

instructional materials to increase their proficiency. Listening to birds on a roost or feeding area and imitating them is a good way to practice calls, even when not hunting. Once a hunter masters the basics, it is important not to over call; over-calling is more likely to chase birds away than under-calling. Here are a few selected pointers (paraphrased) from Ducks Unlimited's 10 tips for duck callers:

- As long as the ducks are coming in, stop calling.
- When targeting particular species, use calls intended for those species. (In other words, don't depend totally on the standard mallard call.)
- If two or more people are calling, one should be the leader while others fill in. Don't compete with your own hunting partners.
- If what you're doing isn't working, make a change of some kind. The birds obviously aren't buying what you're trying to sell.

Predator Calls

Predators such as coyote, fox, and bobcat respond to calls that mimic wounded animals. Calls for predators can be air operated or electronic. These calls can be purchased at most sporting goods stores. Some of the electronic calls also have a decoy attached to entice the predator when they get close.

Decoys

Decoys are great at luring some species into shooting range. Generally, decoys are used in turkey and waterfowl hunting. Sometimes elk and deer decoys are effective at bringing in the big boys, although this technique is not widely used in Washington. Also good to decoy are predator species such as coyote.

There are cow decoys available as well. Not elk cows, but moo cows. These can be used to stalk up on game such as deer, elk, turkey, coyote, etc. Other decoys that are available are known as confidence decoys. It gives the animal confidence that no human presence is in the area. One such confidence decoy is a blue heron when waterfowl hunting.

Some decoy safety tips are:

- Don't carry an uncovered decoy
- Establish a minimum 50 yard line of sight
- Set the decoy about 20 yards out from your blind
- Look before you move
- Call out to an approaching hunter. Do not wave your hand!

Deer and Elk Decoys

Generally, unless hunters are hunting their own property, a decoy the size of a deer or elk may be very difficult to put into place. However there are decoys that are just the deer or elk silhouette that fold into small packages and are very light. These are generally referred to as Montana Decoys.

When hunting deer during the rut, hunters will find that a buck decoy can bring in other bucks looking to assert their place in the breeding chain. Coupling a decoy with rattling and grunts from a grunt tube should prove to be effective.

During the rut, most herd bulls are protecting their harem of cows from other bulls. Generally once a bull is on the move toward a set, the hunter wants to pull back on the bugling and produce cow calls. As such, having a cow elk as your decoy can put the bull at ease and pull him into shooting range as he comes to add your decoy to his harem.

Turkey Decoys

Turkey decoys can be effective when hunting. They can attract, distract, challenge, or instill confidence in the turkey you have your eyes on. Decoys come as a hen, jake, or tom. The hen decoy is great for pulling in toms that are strutting in spring. Jake (immature tom) or small-bodied tom decoys can be used to bring in toms that feel the decoys are challenging for the tom's hens.

Waterfowl Decoys

Some hunters, especially those who hunt geese on open fields and those who hunt ducks on large bodies of water, may use dozens or even hundreds of decoys to help draw birds into shooting range. However, beginners can get by with a dozen mallard decoys. Most ducks seem to recognize mallards, even fake mallards, and will feel safe landing among them. In fact, geese will sometimes be drawn in by mallard decoys. If decoys look real and are where the ducks might want to be, it doesn't matter whether a dozen mallard imitations or five dozen decoys representing every waterfowl species found in this part of the country are used.

When purchasing decoys, hunters want to ensure they come with lines and weights to hold them in place. A decoy bag or waterfowl sled makes bringing the decoys in and out of the hunting area easier.

There are types of decoys called "jerk rigs," where the hunter has several decoys on a line anchored with a shock cord, that the hunter can jerk the cord to create decoy movement. This type of rig will help the decoys look more lifelike and will also draw ducks' attention away from the blind. There are also decoys that have spinning wings. When the cord is jerked, the wing spins to imitate a landing duck. Battery powered or other electronic waterfowl decoys are not legal in Washington.

Goose flags and kites are attraction devices that may come in handy when hunting over goose decoys. Flags are colored to mimic a landing goose and can help draw the geese into shooting range. However, this decoy is powered by a human in the blind, which may make the person operating the device the point on which they focus. Hunters are well advised to be totally concealed in the blind when using kites to attract geese.

Predator Decoys

There are commercially available electronic decoy units for coyote and other predators that look like an injured rabbit or small mammal.

Attractants

There are many attractants that hunters can use to bring animals into shooting range. They can be scent attractants, salt blocks for animals to lick, or actual feed to entice the animals in close. The good thing about these attractants is that hunters can be more selective in harvesting animals since they generally will have some more activity and the animals will stay in view longer. However, some hunters feel that using attractants is un-ethical. It is legal in Washington State to bait all big game animals except bear. Using attractants or bait for bear and game birds is illegal.

Hunters that choose to use attractants should place them up wind of their stand or blind to make sure their scent doesn't mingle with the attractant. When placing attractants hunters should select a spot that is within shooting range of the blind or stand with the hunting equipment that is being used. Also attractants might be placed in sites that have multiple avenues of entrance so the animals can come in from the direction in which they are most comfortable. Using trail cameras over locations that have attractants can be good to see if animals are using the area and coming to the attractant.

Sighting in Hunting Equipment

Before going hunting, ethical hunters should make sure that their hunting equipment is shooting straight and is sighted in properly. Some equipment such as the long bow generally doesn't have sights and cannot be sighted in, but those that do like the compound bow and rifles can be easily sighted. Below is a process to follow when sighting in your hunting equipment:

- Always practice shooting at a place with a soft, safe backstop, preferably a public shooting range that is well supervised
- Put up a target at the distance you are zeroing to
- Aim at the bullseye
- Fire three rounds at the target
- See where your grouping was
- Adjust the sight accordingly
- Fire another three rounds
- Adjust the sight accordingly and repeat if necessary

Shotguns shooting shot, longbows, and recurve bows generally won't have any sights. Longbows and recurves tend to require instinctual shooting but the hunter must practice extensively to become proficient. Patterning a shotgun will give the shooter a better idea as to what the pellet spread looks like when reaching the targeted distance. Below is a description for how to pattern a shotgun:

- Always practice shooting at a place with a soft, safe backstop, preferably a public shooting range that is well supervised
- Put up a target at the distance you are patterning
- Aim at the bullseye
- Fire a single round at the target
- Look at the pattern of the shot.
 - You can tighten the pattern by using a tighter choke. However, if tightening the choke increases the pattern size, you have over-choked the shotgun and need to use looser chokes to get the pattern you desire.
 - o If you do not have a shotgun that has interchangeable chokes, you can shoot steel or another non-toxic shot because they tend to hold tighter patterns.

Shooting Positions

Generally, there are four rifle shooting positions for hunting big game and small game animals. The shooting positions are prone, sitting, kneeling, and standing, although there are numerous variations for each of these positions. When archery hunting for these animals, hunters generally only can use three of the four positions because shooting prone is difficult unless they are laying on their side with the bow perpendicular to the ground.

The instructions below are meant for shooters who are right handed and shooting a rifle, muzzleloader, or slug gun. If the hunter is left handed, these directions are reversed. Archery hunters should use the same body positions making sure there is enough clearance for the bow to function properly.

Standing (off-hand) — This is the most unstable shooting position because there is no assistance to steady the rifle on another point of contact. The hunter stands with their feet a shoulder width apart and with the left side facing the target making sure the butt of the rifle is firmly against the shoulder. The rifle stock is supported with the left hand, but not too tightly. Accuracy can be increased by adding a bi-pod or tri-pod under the rifle fore stock or by using a tree to help steady the rifle. If the hunter cannot hold steady and is not 100% confident in the shot, He/she should hold off on the shot and wait for another shooting opportunity.

Kneeling — This shooting position is more stable than the standing position because the shooter's knee is used to help steady the rifle. The right knee is placed on the ground and the shooter leans back on his/her right foot. The left foot is placed in front of the shooter in line with the target with the sole of his/her boot on the ground. The left foot can be slid in or out to allow the left elbow to rest close to the boney part of the left knee. The rifle butt should rest firmly against the right shoulder, and the left hand should support the rifle stock with a moderately firm grip.

Sitting – This position is the second most stable shooting position. It allows for both arms to be supported by the knees. In this shooting position, the shooter sits on the ground with

his/her legs out in front of the body bending the knees so they can be used to support the arms. The left elbow will rest on the left knee near the boney part of the knee and the right arm will rest on the right knee near the bone. Having the two points of contact increases the shooter's steadiness in this position.

Prone – This is the most stable shooting position since the elbows are in contact with the very stable ground. Laying on the belly slightly angling off to the left, both elbows are planted on the ground so the upper body is resting on them. The left arm is then extended up to the fore stock for added support. For extra support, a hunting pack can be placed under the end of the rifle. Of course, this shooting position won't work if the topography contains tall grass or heavy brush.

Shot placement

Shot placement is crucial when trying to harvest an animal. Ethical hunters will only take good shots that make the most humane harvest. The humane, one shot harvest only happens when the shooter is 100% confident in the shot, and this kind of confidence comes from regularly practicing with hunting equipment before the hunt. Another way to be confident of a one shot harvest is to know exactly where to place the shot while paying attention to any obstructions between the shooter and the game animal which would significantly affect the projectiles trajectory. Either through experience or the use of a range finder, the ethical hunter is aware of the distance he/she is shooting so as to make an effective, ethical, one shot harvest. Ethical hunters don't take shots that are well beyond the effective range of their hunting equipment and ammunition combination. It may be impractical to use the range finder when hunting waterfowl or upland birds, but practicing by shooting clay pigeons at a trap range will help bird hunters better understand their effective range. Below are suggested shot locations when harvesting each game species. The dots on the pictures show where the shot will be most effective.

Big game shot placement Broadside

This is by far the best shot that a hunter can have. Since the vital organs are easier to hit with this shot, most experienced hunters will wait until this shot presents itself. The projectile will most likely go through both lungs and possibly the heart when taking this shot.



Photo by WDFW



Quartering away

This shot is also fairly effective for harvesting big game, but can be a challenge for some hunters. The object of this shot is to hit the tail end of the lung that is toward the hunter and the middle or front of the lung that is away from the hunter. The aim point is about four ribs in from the tail of the animal.

Photo by Craig Lemon

Quartering to

This shot is getting more difficult because there are more areas of bone that can be hit. Archers probably should not take this shot as the probability of hitting a rib or shoulder is increased. Also the animal may see the archer draw and release and "jump the string." This refers to when the animal moves when the bowstring is released and can change the point of impact of your arrow. Muzzleloader and rifle hunters may not have an issue since the bullet should go through bone.



Photo by Antony Sirgedas



Head-on

The head-on shot generally should not be taken. The chance of hitting vital organs is considerably less than the above three shots. The only really viable shot would be a heart shot. However, a shot from this angle would also most likely rupture the intestines, stomachs, and other areas of the game animal that have digestive juices or worse. Archers should not take the shot because the sternum will most likely deflect the arrow.

Photo by Eric Johnson

Rear end

This shot should not be taken. The chance of hitting vital organs is considerably less than broadside, quartering to, and quartering away shots. A shot from this angle would also most likely rupture the intestines, stomachs, and other areas of the deer that have digestive juices or worse.

Photo by Laura Rogers

Upland bird and Waterfowl shot placement

Photo by Flick Creative Commons, Andrey

Flying Away and Head On

When waterfowl is flying away or head on, the shooter will want to start moving the

shotgun from behind the bird, then pull the trigger when the shotgun barrel covers up the bird. "Leading the bird" in this manner makes sure that the shot will land in the right place.

Crossing

When shooting birds that are crossing, the shooter will want to place the shot in front of the bird so it flies into it. This is also known as "leading the bird." Depending on the speed of the bird, hunters may need to lead them farther than others.



Photo by Keith Fahlgren

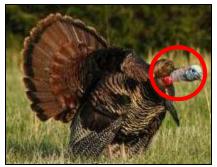


Photo by National Wild Turkey Federation

Turkey shot placement Shotgun

No matter which shotgun is being used, a head/neck shot is the preferred method for harvesting turkeys. This prevents meat loss due to shooting up the breasts and turning them to hamburger. The preferred shot is to aim for the middle of the neck right where the feathers start to appear.

Archery/Crossbow

If guillotine style broadheads that are meant to decapitate the bird are being used, shooters should aim just like they were using a shotgun. With regular broadheads shooters will want to aim for the vitals that are just below the wing joint when broadside, base of the tail when the tom is strutting and facing away, or just above the beard when facing head on.



Photo by WDFW

Hunting Access

Hunting access is currently one of the biggest concerns for hunters. In Washington, about 40% of the land is publicly owned and open to hunters and recreationists. These lands are managed by state or federal entities. State owned lands are managed by WDFW and Washington Department of Natural Resources. Federally owned lands are managed by Bureau of Land Management, United States Forest Service, United States Fish and Wildlife Service, National Park Service, and the Bureau of Reclamation. State and federal lands all have different land management mandates that affect when and where hunting is permitted. WDFW owns and manages 33 wildlife areas throughout the state, totaling approximately one million acres. WDNR manages nearly 5.6 million acres. Public lands are great places to hunt, watch birds, hike, and enjoy the outdoors.

Public Lands

Public lands are open to all members of the public. This is great news for outdoor enthusiasts in Washington because it guarantees there will always be land open for outdoor recreation. These lands are typically owned by state or federal government agencies, but some are owned by cities and counties. Check the regulations for the different agencies to learn what their rules and regulations are, as some may not allow hunting or other activities based on the agencies' missions. Some agencies may also require an access or parking pass.

Private Lands

Private landowners have the right to prohibit access to their property. Hunters can contact the county assessor's office for information on landownership for each land parcel in the county.

Please note that some parcels have a Limited Liability Company (LLC) or other entities listed as the owner, in which case ownership may be difficult to determine.

Current state laws under RCW 84.34 provide a lower tax rate for private forest land that is designated for timber production. However, the law does not state that public access is a requirement. Some timber companies do allow access to their lands. The best source of information on how to access these lands is the private forest landowner who manages the property of interest.

Tribal Lands

Some tribal lands allow public hunting, and there are generally additional fees or permits required to access the property. Many of the open tribal lands are managed to provide additional hunting access for users. The best source of information for hunters is the tribal entity managing the property of interest.

Access Passes

WDFW Vehicle Access Pass

This pass covers most day use fees on WDFW lands <u>ONLY</u>. The pass allows the driver and any passengers in a private vehicle the use of the recreational areas. Additional fees may be charged at camp sites or other developed recreation sites. The Vehicle Access Pass is interchangeable between two vehicles. To be displayed, the pass must be visible from outside of the vehicle (placed on dash, hung from rear view mirror, etc.) so enforcement personnel can verify that the vehicle is legally parked on lands managed by WDFW. For a list of locations requiring the Vehicle Access Pass, visit the WDFW web pages listed below:

WDFW Wildlife Areas – <u>wdfw.wa.gov/places-to-go/wildlife-areas</u>
WDFW Water Access Sites – <u>wdfw.wa.gov/places-to-go/water-access-sites</u>

Washington Discover Pass

This pass covers most day use fees on WDFW, Washington Department of Natural Resources (WDNR), and Washington State Parks (Parks) lands. The pass allows the driver and any passengers in a private vehicle the use of these recreational areas. Additional fees may be charged at camp sites or other developed recreation sites. The Discover Pass is interchangeable between two vehicles. To be displayed, the pass must be visible from outside of the vehicle (placed on dash, hung from rear view mirror, etc.) so enforcement personnel can verify that the vehicle is legally parked on lands managed by WDFW, WDNR, and Parks.

For a list of locations requiring the Discover Pass, visit the Discover Pass website at www.discoverpass.wa.gov.

USFS Northwest Forest Pass

This pass covers most day use fees on National Forest lands in Washington and Oregon. The pass allows the driver and any passengers in a private vehicle the use of USFS recreational

facilities. Additional fees may be charged at camp sites or other developed recreation sites. The Northwest Forest Pass is interchangeable between vehicles in the same household. To be displayed, the pass must be hung from the rear-view mirror of the vehicle. For more information on the Northwest Forest Pass, visit the USFS web page at www.fs.usda.gov/detail/r6/passes-permits/recreation/?cid=fsbdev2 027010.

USFS Interagency Pass

This pass covers the purchaser nationwide at all Unites States Forrest Service (USFS), Bureau of Land Management (BLM), Bureau of Reclamation (BOR), National Park Service (NPS), and Unites States Fish and Wildlife Service (USFWS) sites that charge entrance or standard amenity fees. The pass has a signature line for two individuals who are then considered pass holders. The pass will admit pass holders and accompanying passengers in a private non-commercial vehicle. Please check with the agencies to determine how to display the pass. For more information on the Interagency Pass, visit the USFS web page at www.fs.usda.gov/detail/r6/passes-permits/recreation/?cid=fsbdev2_027020.

Finding Access

Access to potential hunting land can be very confusing and difficult if hunters don't know where to look. Some of the largest landowners in the state are WDFW, WDNR, and USFS, and USFWS also has some locations that allow public hunting throughout the state. WDNR has printed maps available for purchase, which are great resources for finding publicly owned properties throughout Washington. For more information about WDNR's maps, see the web page at http://www.dnr.wa.gov/programs-and-services/buy-maps-aerial-photos-or-survey-data.

For more information on public lands access, refer to these agency websites:

- WDFW http://wdfw.wa.gov/
- WDNR http://www.dnr.wa.gov/
- USFS http://www.fs.fed.us/
- USFWS http://www.fws.gov/
- BLM http://www.blm.gov/wo/st/en.html
- NPS http://www.nps.gov/index.htm
- BOR http://www.usbr.gov/
- RCO Public Lands Inventory http://publiclandsinventory.wa.gov/#Map

WDFW Places to go hunting page

The WDFW Places to go hunting web page has information about accessing and enjoying WDFW-managed lands. Sportsmen can also find information about the Private Lands Access Program, properties to hunt, quality hunt opportunities, the Hunting Regulations Webmap, and several other valuable resources. Visit the places to go hunting page at https://wdfw.wa.gov/hunting/locations.

Hunting Regulations Webmap

The Hunting Regulations Webmap provides users with a different way to review the hunting regulations. Users can explore regulations data by either selecting criteria for a search or clicking on the map to find out what hunts are available for their selected hunt type. In addition, it has the capabilities to look at public/private ownership, show private lands hunting opportunities, map water access sites, and display satellite imagery. The data shown in this webmap are an extension of the printed PDF pamphlet. For complete rules, see the current WDFW hunting regulations. This tool is also available for use on smart phones.

You can access the webmap at https://wdfw.wa.gov/hunting/regulations.

Navigating the Webmap

To start using the webmap tool, you must first become familiar with the controls. The webmap has several sections that control how the map displays information to the user. These sections are:

- Header and Helpful Links
- Zoom In/Zoom Out
- Default View
- Current Location
- Previously viewed information
- Legend
- Search for Hunts
- Measurement Tool
- Location Search
- Map Options

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Header and Helpful Links

The Header and Helpful Links section may display as text or as just the WDFW Logo on the top of the application. If no text is displayed, select the WDFW logo to expand the menu. The display depends on the internet browser.

The menu has eight options:

- 1. WDFW Home Opens the WDFW home page
- 2. WDFW WLAs Opens the WDFW Wildlife areas (WLAs) webpage
- 3. Regulations Opens the WDFW hunting regulations webpage
- 4. Help Opens a PDF help document
- 5. Tutorial Opens a video walkthrough tutorial of the webmap with no sound
- 6. WACs Opens the Washington Administrative Code for hunting seasons
- 7. Feedback Opens a feedback survey on SurveyMonkey.com
- 8. Report Issue Emails the development team at DigitalHuntingRegs@dfw.wa.gov

Zoom In/Zoom Out

To zoom in or out, you can do one of two things.

- 1. Select the + or in the top left hand of the map
- 2. Use the scroll wheel on your mouse

Default View

The default view button looks like a house. It returns the user to the entire state view. It does not remove any of the options you may have selected.

Current Location

The current location button will, if given permission by your internet browser, zoom into your computers location. This may help with locating areas very near your house that you might be able to hunt.

Previously viewed information

The previous viewed information button will send the screen back to the last time you manipulated the map. It will not clear any changes to the map options.

Legend

The legend describes the identifying marks on the map. For example, it notes a blue dot as a water access site.

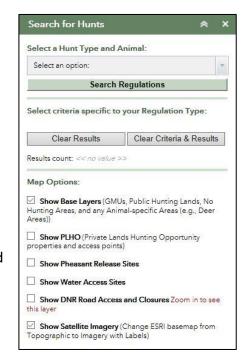
Search for Hunts

This is the primary tool for exploring the hunting regulations data. If the Search for Hunts window is closed at some point, you can select the magnifying glass to reopen the search for hunts menu.

To search the regulations, select a hunt type and species. Two hunt types are available for big game species and turkeys (small game is an option):

- General Season
- Permit Hunt

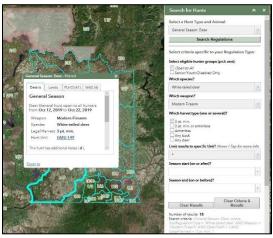
Making this selection will add additional search options and change the drop down menu color to green. Select additional search options to narrow the search. Depending on the field type, you will select from either a drop-down menu, a date-picker, or checkboxes. If you do not want to use a field as a search parameter, either reset the drop-



down menu to the asterisk (*) or delete the date you entered in the date-picker. Select "Search Regulations" to run your search. The number of results and your search criteria will display at

the bottom of the Search for Hunts window. The map will draw your results and, if needed, zoom into the location on the map.

NOTE: If no regulations exist with your parameters, the bottom of the panel will display "Results count: 0, Query is too narrow, broaden your search parameters."



Once the map draws the search parameters, click on a teal-dashed-outline to see more information about the regulations in the specific GMU. The information lists some or all of the below items:

- Hunt details (weapon, date range, etc.)
- Public hunting/non-public land distributions
- Descriptions of specific hunt notes for the selected hunt (where applicable)
- Private Lands Hunting Opportunities (in applicable units)
- List of Water Access Sites

There are always at least two tabs in the popup, Details and Lands. The Details tab specifies the conditions of a particular hunt along with links to additional restrictions (where applicable). The Lands tab lists land ownership information and a pie chart of the percentage of land in the selected unit. Sometimes public landownership in some areas is so low the owner may not appear on the chart. You can drag the popup window around if it is in your way.

If the selected unit has Private Lands Hunting Opportunities (PLHO), the opportunities are listed in the PLHO tab. The PLHO tab holds a table of all available private lands hunting opportunities that intersect the selected unit. Each opportunity has a link to their specific page on the WDFW webpage. If you would like to display the PLHO polygons on the map, select the "Show PLHO" check box in the "Map Options" section.

NOTE: Multiple results may exist in a selected unit! When this occurs, the Page buttons will appear at the top of the popup and it will show the total number of query results [Query Results (# of #)]. Click the Page buttons to cycle through results.

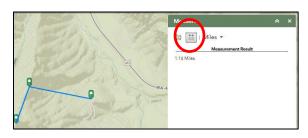
To clear your search parameters, click the "Clear Criteria & Results" button at the bottom of the Search for Hunts window. This will remove the results from the map and the map will reset to the starting display. Closing the "Search for Hunts" window will also clear your results.

Measurement Tool

Selecting the ruler icon will measure the area of a selected portion of the map or the distances between points on the map. The map can calculate area and distance in several different ways. To select a unit of measurement, select "Acres" at the top the measurement section.

To select an area of the map to determine its area, select the Area tool on the measurements section. Select three or more points on the map to determine the area on the map to measure.





To measure the distance between at least two points, select the Distance icon on the measurement section. Click on the starting point for the measurement and then click on the point you would like to measure. If there are multiple points in the route, you can click multiple times and the distance will measure accordingly.

Location Search

You can search for locations like an address or city such as Ellensburg. However, the search tool may search locations outside of Washington. The site does not recognize GMUs, lakes (unless part of a town name like Lake Stevens), or other geographic names.

Map Options

The webmap has several different layers/options that can be displayed at any one time. The bottom of the "Search for Hunts" tool has the six map options:

- Show Base Layers (GMUs, Public Hunting Lands, No Hunting Areas, and any Animalspecific Areas (e.g., Deer Areas))
- Show PLHO (Private Lands Hunting Opportunity properties and access points)
- Show Pheasant Release Sites
- Show Water Access Sites
- Show DNR Road Access and Closures Zoom in to see this layer
- Show Satellite Imagery (Change ESRI basemap from Topographic to Imagery with Labels)

Some of the layers are not visible until you are sufficiently zoomed into the map.

WDFW Private Lands Access Programs

Since 1948, WDFW has worked with private landowners across the state to provide public access through negotiated agreements. To mitigate some of the impacts of more limited and restricted access throughout the state, WDFW has been working to increase recreational opportunities on private lands by securing grant funds, increasing private lands staff, and increasing public outreach. Through these efforts, WDFW has enrolled roughly one million acres of privately owned property for public access. WDFW currently has five types of private lands access programs, described below.

Feel Free to Hunt

Since private lands in this program are open to hunting, hunters are not required to gain additional permission for hunting lands that have a Feel Free to Hunt sign posted. To find properties that are part of the Feel Free to Hunt program, visit the WDFW website at http://wdfw.wa.gov/hunting/hunting_access/private_lands/type/22/.

Register to Hunt

Access to private lands in this program are regulated by registration. Hunters are required to sign in and sign out to hunt on properties that have a Register to Hunt sign posted. These properties may also have some other restrictions, which are detailed online. To find properties that are part of the Register to Hunt program, visit the WDFW website at http://wdfw.wa.gov/hunting/hunting access/private lands/type/25/.

Hunt by Written Permission

These properties are private lands where hunters must contact the landowner to obtain "written permission" before hunting. WDFW provides signs and permission slips to landowners who make their lands available through this program. A landowner name and contact telephone number are placed on the Hunt by Written Permission signs so hunters can contact the appropriate landowner for permission. Hunters are required to obtain landowner contact information by visiting the property and acquiring the information directly from the sign. WDFW does **NOT** provide the contact information directly to hunters.

When talking to the landowners, be sure to be courteous and respectful. The landowners are not required to give permission to all those seeking it because they control the hunting pressure on their property. To increase the chances of gaining access, seek permission well before the season starts. For fall hunts, July or August are good times to contact landowners. Even if they do refuse access, make sure to thank them for their time. Be sure to respect the landowner's wishes and their property restrictions. To find properties that are part of the Hunt by Written Permission program, visit the WDFW website at http://wdfw.wa.gov/hunting/hunting_access/private_lands/type/24/.

Hunt by Reservation

These private lands require hunters to have a reservation permit issued by WDFW prior to hunting. In some cases, landowner contact may also be required. All rules of the WDFW Hunt by Reservation program must be followed, in addition to any special rules set by the individual property, including those posted at the site.

The Hunt by Reservation system requires hunters to sign up for an account using their WILD ID and password. You will use your WILD ID as the sign in name. Your WILD ID is a unique identification number for the Washington Interactive Licensing Database (WILD) and can be found near the top of your hunting/fishing license, just above the barcode. The sign-up page can be found on the WDFW website at

http://wdfw.wa.gov/hunting/hunting access/private lands/myreservations.php.

Once logged into the system, select the "Find Hunts to Reserve" button. This will open a page listing properties by County, Hunt Type, and GMU. This is a great feature because if hunters know they want to hunt Adams County, it makes those easier to find. If they want to hunt GMU 101 because of season and legal animal restrictions, it will distinguish hunts by GMU as well. To distinguish "Hunt by Reservation" properties only, select the "Hunt Type" tab and go to the "Hunt by Reservation" section.

Once you have found a property, select the name from the list and read the information about the property's restrictions. If you agree to the restrictions, you can select the general hunt time frame that is open and select the "Hunt Details" button. Note that there is a bit of text below the button that will give you the status of the property: if the property is full, reservations have not yet started, or reservations are being accepted for that property. When you're in the hunt details, you will want to select the available "Hunt Dates" drop down menu and select the dates you wish to hunt. After selecting those dates, read the terms and conditions, check the box agreeing to those terms and conditions, and then select "Reserve Hunt Date."

Once a reservation is made, it will be listed in your "Active Reservations" list in the Private Lands Reservation System. You can view/edit the reservation, print the permit, and/or cancel your reservation from this page. Permits are required to be printed and clearly displayed on the dashboard of your vehicle in order to access the property. For more information or for questions on the Hunt by Reservation tool, please see the online help section at http://wdfw.wa.gov/help/categories/Hunting/Hunt+by+Reservation+System/.

Landowner Hunting Permits

In order to hunt on a property enrolled in the WDFW Landowner Hunting Permit (LHP) program, hunters must either be selected in a special permit drawing held by WDFW or the Landowner or contact the Landowner directly. Landowner name is included on signs posted on property boundaries. In addition to a hunting permit from WDFW, hunters must contact the landowner prior to hunting and obtain a written permission slip that must remain with them while hunting on the property. LHP properties may be listed under the Hunt by Reservation program.

Asking for Private Lands Access

Another option to get onto private lands for hunting is by contacting landowners to ask permission. If hunters want to gain access to private property, they should do preseason scouting of their desired area and locate the lands they might want to hunt. Once a hunter has located properties to hunt, landowner contact information can be obtained from the county tax assessor's office by referencing the county assessor's web page. The local phone book, the white pages, and 411 can assist in locating landowner information as well. Private companies hunting applications can assist with some information and are great to store in the smartphone. Asking for landowner permission should be done several weeks prior to hunting season if possible.

If landowners refuse to grant permission, make sure to thank them for their time. Hunters who are persistent in their search will most likely gain access to some lightly hunted areas and make new friends along the way. Other options include hunt clubs and hiring a guide who has access to private farms and ranches.

In all instances, respect the landowner's wishes and their property restrictions. By being respectful, you are doing your part to help ensure future access to their lands. It only takes one bad experience to taint a landowner's view of the hunting public.

Keep these following guidelines in mind:

- Leave gates the way you find them.
- Do not litter, and if you find litter, pick it up and carry it out.
- Ask if there is anything you can do to help with the operation (e.g. repair fences, plant trees, remove old fences, paint buildings, etc.)
- Be respectful and polite when seeking permission.
- Be conscious of time when calling and do not become a nuisance (4am calls are not viewed favorably).
- Seek permission early and do not wait until opening day.
- Wear street clothes when approaching landowners. Do not show up wearing hunting clothes and carrying a firearm or bow.

The next page features a landowner contact form that WDFW has come to adopt. This form can be used by hunters for contact information on the landowner and to show proof of permission to be on the property. Hunters can remove the portion above the dotted line to give to the landowner for their records.

Landowner Communication Form

Hunter Contact Information

0	Name:
0	Phone #(s):
0	Vehicle Description & Plate #:
0	Home Address:

Landowner Information

momation		
0	Name:	
0	Address:	
0	Phone #(s):	
\circ	Preferred Contact Method	

Sample Questions to ask the Landowner

Permission

- Am I allowed to camp on your land? If so, are campfires allowed?
- Do you anticipate that anyone would be upset if I park my RV or camp near the area?

Safety

- Is there anything on your property or near your home I should know about?
 - o soft ground
 - o animals (dogs, livestock, etc.)
 - drainage/erosion issues
 - vehicles/structures out of site
 - neighbors that may not approve of hunting
 - o special or sensitive vegetation
 - Other?

Is there anything I can do to help out?

- Buck hay, clean windows, mend fence, repair equipment, other?
- Would you like any part of the animal(s) I harvest?
- Hunters could make an effort to pick up trash on or around the property. This effort is always appreciated and helps out even if the landowner doesn't ask for any help.

Courtesy

- What are your family's/neighbor's normal quiet hours? I do not wish to disturb you.
- Is there anything you would like me to report to you if I see it?
- Am I allowed to hunt your entire property?

Navigation

- Where do you wish me to park my vehicle(s)?
- Which gates should remain open/closed? In general leave gate(s) the way you found them.

Hunting

- Are there any game species you wish me to or to NOT harvest on your property?
- Is it ok to field dress game on the property?

Pre-Season Scouting

Scouting is a great way to locate areas that game animals are using. Most hunters scout for big game and turkey. To scout effectively, the hunter takes to the field in search of feeding areas, bedding areas, or areas that there is a lot of game animal sign. Setting trail cameras in likely habitat will allow the hunters to see what species are frequenting the area. These can also be placed on game trails or with an attractant.

When scouting big game, it is wise to start in the area that sign was found during the previous season. If this is a new area or the hunter didn't find locations of good sign, look for watering areas and look for game trails. Scouters are encouraged to go afield with a good pair of binoculars to glass for game and likely locations. Being at the highest point in most of eastern Washington will help hunters locate animals at greater distances and give them a better idea of how the habitat is being used. Also scouters should expect to be in the field for many hours if they are unsure of the exact area that the game is using. Be sure to pack water and food/snacks.

When scouting turkey, start in the area that sign was found during the previous season. If scouting before the spring season, bring a locator call and use it to help locate the roost tree. This is a tree with excessive turkey droppings below it and is the spot that the turkey flock uses to roost for the night and keep themselves safe while sleeping. Using the locator call at daybreak before the flock has flown down to feed will help to direct the scouter in the right direction of the roost tree. If scouting for the fall season, start by looking in the fields that were used during the spring season or anywhere that grasshoppers can be found. Remember that turkey have extremely good vision, so camo up when scouting.

When scouting waterfowl, hunters should go to the general area where they will be hunting and watch for birds. It is especially noteworthy to recognize where birds are they coming from, where they are going, and where they are landing. Generally waterfowl hunters will look for the feed areas that the birds are using such as a recently cut agricultural field, the local pond, or for the sea duck hunter, marine areas. Hunters should note the time that the birds are moving and start planning on setting up the decoys if practical or setting a pass shooting blind/stand in these locations prior to their movements.

The department's website contains annual hunting prospects that detail WDFW biologist's expectations for hunting for the current year's seasons. These prospects are broken into 17 districts that mark where a particular biologist is responsible. Hunters can find the hunting prospects online at https://wdfw.wa.gov/hunting/locations/prospects. This can be another good way to determine where to begin scouting for animals.

When scouting animals in areas that will be hunted, hunters are encouraged to not actively stalk game. The closer to the animals that the scouters get, the more educated the game may be during the season. Educating the game may push them into other areas where there is suitable habitat. When scouting, make sure to prepare, act, and dress, as if scouting activity was

the same as the day of the hunt. Remember that animal behavior will change once there is hunting pressure on them so the hunter wants to be able to adapt to the changes in their habits. Sometimes this can be as easy as setting a duck blind 100 yards closer to the feeding area or 20 feet toward the game trail. Other times this could be a complete revamping of the hunting tactics and starting over in a new area.

Tracking

Tracking is probably the most difficult skill to learn for the beginning hunter. However, it is a necessary skill to be successful in retrieving big game animals. At some point, every big game hunter will experience the animal they just shot running off into the brush and will be forced to follow a blood trail to find the wounded animal. Hunters are generally advised to give the animal about 30 minutes after the shot to lie down and expire. Before starting to track the animal, it is advisable to watch and listen for any indications the animal may be down.

Go to the spot where the animal was standing at the time of impact. If there are two hunters, one should stay at the place where the hunter shot from and the other go to the spot of impact. Look for any blood or hair in the immediate area. Once you find some blood, examine it to see what kind of hit the animal took (if archery hunting, look at the arrow to help determine what kind of hit it was). Bubbly blood means a shot to the lungs, dark red blood means a heart shot, and black blood means a liver shot.

The tracker should slowly make his/her way toward the last place the big game animal was seen running, keeping eyes on the ground sweeping left to right looking for blood. If blood cannot be found, the tracker should walk in slow circles until blood is found. There are lighted tools that will make blood stand out better, but they will only work at night. Mark the spot of last blood or have one hunter stay there and make a slow circle at about 10 feet. If blood cannot be found at 10 feet, adjust the search distance. Remember that this is SLOW and METHODICAL tracking. Continue on until the animal is found. If while tracking the animal is

heard running off again, wait another 30 minutes before starting to track the animal again. When the animal is found, approach it from behind and make sure to poke it with a stick or your equipment to verify it has expired. If not, dispatch the animal as humanely as possible.

Tagging

When the hunter finally retrieves his/her animal, it is important to make sure to notch and affix the properly validated transport tag to the animal. Immediately after harvesting a deer, elk, bear, cougar, or turkey, the appropriate tag of the person who has taken the animal must be validated by cutting out and completely removing the month and day of kill. The month and day must be completely removed, a slit is not acceptable. Then the tag must be securely



attached to the carcass in a visible manner. Washington tags have little holes in the right hand side of the tag. This is a good spot to stick a zip tie through and attach to an antler, ear or leg. Another method of attaching the tag is to use electrical or duct tape to secure the tag to the harvested animal.

Game care

Once the hunter harvests a game animal he/she must take care of it in the proper way to ensure great meat. Hunters are advised to keep in their hunting pack or vehicle the tools needed for caring for game that is harvested. There are commercially available game cleaning kits that have bags for organs and gloves to keep hands clean. These are generally used for big game and some small game like rabbits and bobcat. Those who are traveling a great distance to get home may want to have a cooler with ice ready to cool the meat and keep it from spoiling.

Hunters can even create their own game care kit. Here are recommendations as to what items should be included:

- Latex or Nitrile gloves to keep hands clean
- Knife
- Knife sharpener
- Bags for organs
- Hand sanitizer
- Game bags
- · Bag for animals skin if desired
- Zip ties for attaching tags
- Camera for pictures



Photo by WDFW

Big Game Field Dressing, Skinning, and Processing

Field dressing is removing the internal organs from the animal and should be done as soon as practical after the animal is recovered. Dressing big game animals very soon after the harvest decreases the chances that the digestive juices from the intestines, or worse, may come in contact with the meat. There are many valid ways in which to field dress any harvested animal. Find below a prescribed way to field dress. For other ways to field dress big game, search for big game field dressing videos online.

After harvesting the animal, it is important to keep game meat clean and cool. Skinning the animal will help cool the meat faster. Big game animals can be skinned on the ground, or while it is hanging. Hunters can purchase a gambrel and pulley to hoist the animal up, but they are not required.

When field dressing, or making any skinning cuts, make sure to cut inside out where possible. This method has the cutting edge of the knife cutting the interior skin before the outer layer of skin. Doing this will help minimize cutting hair from the hide and getting onto your meat or dulling your blade.

Field Dressing

- Roll the animal onto its back.
- Find the bottom of the ribcage.
- Insert your knife just below the bottom of the ribcage angled towards the head.
- Cut up the sternum toward the head, splitting the breastbone to the base of the neck.
- Return to the bottom of the ribcage.
- Place the knife in-between your index and middle fingers while keeping the blade tip covered
- Slowly cut down the belly to the base of the anus.
 - You can also use a knife with a "Gut hook" if you have one.
 - Make sure to leave proof of sex naturally attached to the carcass.
- Cut around the anus and pull it out slightly.
- Tie the anus in a knot or use some string around the exposed lower intestine to make sure no droppings get on your meat.
- Cut into the meat to expose the pelvis.
- Using a bone saw or sharp hatchet, carefully split the pelvis where the lower intestine goes through the bone.
- Move back up to the neck area.
- Sever the windpipe as high as you can.
- Tie this into a knot or close it with string.
- If you want to keep and eat the heart, move down to the chest cavity and remove it.
 - The heart and liver are eaten by some hunters. Place these organs into a game bag to keep them clean and cool.
- Slowly cut the diaphragm that separated the heart and lungs from the intestines and stomach making sure not to puncture any organs.
- Move along the spine and detach the innards as close to the backbone as possible.
- Gently pull the lower intestines out from between the split bone.
- If you want to keep the liver, collect it from the entrails now.
- Once all connections are severed, roll the animal on to its side and slide the entrails out.

Skinning

- Make small vertical cuts in the hind legs just below the ankle area inside the ligament that controls the lower leg.
- Put your gambrel hooks through those cuts.
- Hoist the animal up.
- Make a cut in the skin but not into the meat around the hind leg just below the point the deer is hanging. Go slowly and make sure not to cut that tendon.
- Make a cut from the previous step to the pelvis area where the meat is exposed.
- Make little cuts along this line to create a flap you can hang on to.
- Pull the skin away from the meat and cut the connective tissue. Try not to cut into the meat.

- Once you have skinned the entire leg, repeat the previous four steps for the second hind leg.
- If you are skinning at home you can now cut the tail off.
- Pull down on the skin to help separate it from the meat.
- While holding downward pressure, cut the connective tissue sometimes referred to as silver skin. Just run the knife along the edge where the meat and skin meet as you pull.
 - If you are going to want the skin tanned, try not to nick the hide.
- Start working around the carcass, making cuts as needed.
- Once you get to the front legs, cut around the knee joint.
 - There is very little meat in the lower leg.
- Once you have severed the tendons, if you bend the leg to the side it becomes easier to remove.
- Do this on the other leg as well.
- Now that the legs are off, continue skinning down the legs and onto the neck.
- Skin down to about 4 inches from the skull.
- Use your bone saw to cut through the spine just above where the skin is still attached to the carcass.
 - A hack saw could also be used but make sure it is a clean blade.
- At this point you can process the carcass yourself or you can check with a local butcher shop that may be able to process game animals for a fee.

Processing

Processing the carcass is the final step before you can enjoy some of the deliciousness that waits. To process the carcass, you can break it down yourself or you can take it to local butcher shop that processes game animals. There is a fee to have the carcass processed by the butcher shop, but it is cut just like beef.

Hunters that process big game themselves may not get the beautiful steaks and roasts that come out of a butcher shop. Videos of how to process big game can be found on YouTube or can be purchased at local sporting goods and/or online stores. However, those who do choose to process their own game need to remember that the meat has to be protected from freezer burn. A vacuum sealer is a great way to ensure game meat will last for many months to come.

Upland birds, Turkey, and Waterfowl

Birds are generally not cleaned in the field like big game animals. This task can be completed back at camp or at home the same day they are harvested. Hunters traveling a great distance to get home may want to have a cooler with ice ready to cool the meat and keep it from spoiling. It is unlawful to possess in the field or transport game birds unless a feathered head is left attached to each carcass, except falconry-caught birds. So if hunters are transporting the game birds anywhere after cleaning they need to keep the feathered head attached.

When processing birds, hunters will generally clean their game in a manner that is compatible with the way the bird will be cooked. For example, roasted birds will generally be cleaned and

kept whole, barbequed birds will likely be cut into pieces, and smaller birds such as quail, are left whole when cooking. When in doubt as to how the bird will be cooked, the hunter should generally leave them whole. It's easy to break game birds into pieces when a cooking method is decided on but it's impossible to put them back together again once broken down.

Most duck hunters will do what is called breasting a bird. This refers to removing only the breasts as there is not much meat on the legs or other parts of the ducks. Goose hunters however, may want to keep the goose whole because there is more meat on the legs and other parts of the goose.

Skinning

For some hunters, plucking the bird for the skin is too time consuming. They opt to skin the birds so they don't have to pluck the birds. Hunters who want to skin their birds might want to follow the procedure as stated below. Those who don't want to skin their birds will proceed to the next step which is to pluck them.

- Pull the skin up on the breast area to make sure to not nick the meat and make a small slit
- Once the skin has been opened, gently peel it off.
 - Upland bird skin is fairly delicate and can tear easily.
- Remove the wings at the first joint or if you prefer the second wing joint. There is not much meat past those joints.
 - o To do this, find the wing joint and cut around it.
- Remove the feet by cutting around the knee area making sure to sever the tendons.
 - Bend the knee to the side to make this easier.
- Discard the feet unless you are feeling adventurous and want to try bird feet.
- Once the feet and wings are removed, pull the skin down the leg or wing just like removing a sock.

Plucking

Birds can be plucked whole for roasting. To do this, feathers are pulled out once the bird has been transported to the hunter's home. Dipping a bird into scalding water makes it easier to pluck, but be sure to do it outside as a large bird will likely make the stock pot overflow. Be Careful! Keeping a bird in scalding water too long will begin to cook the skin. If a stock pot is not available, the birds can be plucked without the aid of scalding water. The entire bird that is going to be cooked needs to be plucked, unless the bird is still in the field where it needs to have feathers kept on its head.

Processing

To leave them whole, follow these instructions:

- Once you have the bird plucked or skinned, find the bottom of the breast meat.
- Make a small cut here to expose the entrails.
- Reach two fingers into the body cavity and lightly grasp the entrails.
- Pull them straight down, removing the innards.

- Make sure you got the heart from the upper chest area.
- Wash the bird and chest cavity and pat it dry.

To piece the bird out follow these instructions (for breasting a duck follow the first two steps):

- Once you have the bird plucked or skinned, cut down the middle of the chest to one side of the chest ridge bone.
 - o They have a ridge bone in the middle of their chest like chickens and turkeys do.
- Carefully fillet the breast off the rib cage. Then do the other side.
- Turn the bird over chest side down.
- Make a cut along the meaty part of the thigh where it connects to the back for each thigh.
- Flip the bird back side down.
- Push the thigh down towards the cutting board until you hear a crunch. This will be the thigh dislocation from the socket.
- Cut the connecting ligaments and remove the thigh-leg quarter.
- Repeat the last three steps for the other thigh-leg quarter.
- If you want to separate the leg and the thigh, find the area where the two meet by moving the leg back and forth.
- Cut diagonally across this location to remove the leg from the thigh.
- Wash the pieces and pat them dry.

This may take a few tries to get right. If you would like to practice on other birds, try getting a whole chicken and breaking it down like described above. To skin a duck breast, flip the breast over on a cutting board and fillet the skin off the breast.

Once the birds are cleaned and processed, you are ready to have some great table fare!

Hunter Reporting

Hunter reporting is an integral part of hunting. It allows WDFW staff to accurately measure the harvest and coupled with winter surveys of the animal species will help with setting the next year's seasons. The information is necessary for WDFW to effectively manage the game animals. There is a mandatory report for all species that require a tag except cougar, even if hunters do not harvest or hunt. Those who fail to report their tags by the deadline of January 31 will be subject to the \$10 administrative penalty.

All successful cougar hunters must contact a WDFW office or call to report the kill within 72 hours, and set an appointment to have the pelt sealed within 5 days of the notification. The skull and hide (both non-frozen) must be presented so that teeth and biological samples can be taken. Placing a stick or wedge in the cougar's mouth after harvesting it, aids in the removal of teeth. Ensure proof of sex is left attached to pelt. No one may possess an open WDFW cougar seal unless it has been cut by a licensed taxidermist or fur dealer who has received and invoiced the pelt for processing. All successful black bear hunters statewide MUST submit a black bear

premolar tooth per WAC 220-415-090. Tooth envelopes are available at all WDFW offices. The premolar tooth is located behind the canine tooth of the upper jaw. WDFW also requests hunters to submit hair and tissue samples for bears harvested in Chelan, King and Snohomish counties. Hunters who harvest a bear in these counties are required to please contact a WDFW regional office within 24 hours of harvesting a bear.

On the next page is a step by step process to report tags. If hunters do not have access to a computer or if they have difficulties with the online system, they can also call 877-945-3492 and report by phone.

- Go to fishhunt.dfw.wa.gov
- Under the "I want to Submit" section on the left hand side (Highlighted in Orange), Select "Hunter Report".
- Select the "Submit Report" Box in the top left hand corner of the page.
- Enter all customer information fields. Then click "GO".
- o If an error occurs, "customer not found, please try your search again." Verify the information that was entered.
- Select the first species under the "Choose a tag to report on:" section.
- Answer all questions that are on the screen. The questions will change based on the answers provided.
- When completed, the report will issue a message that says, "You have finished the hunter report. Click FINISH to save all of your answers." Click "FINISH" when completed.
- A confirmation page will come up that will show the report has been submitted successfully.
- Write down the submittal date and the confirmation number as this information may need to be referenced at a future date.
- When completed, use the Back button on the screen and it will take you back to the page that shows which tags need to be reported on or have been reported.
- Repeat the process for all tags with an outstanding report.
- This information is used to set future hunting seasons in conjunction with WDFW field staff population surveys.

Becoming a Hunter Education Instructor

Hunter education instructors are volunteers who devote personal time and effort to ensuring our hunting heritage is passed on to the next generation of safe, ethical hunters. Certified by the Department of Fish and Wildlife (WDFW), hunter education instructors are authorized to teach public classes consistent with curriculum and policies established by WDFW. Instructors must be at least 18 years of age, keenly interested in promoting safety, wildlife conservation, and responsible outdoor behavior, and be willing to teach or assist in at least one class per year. If you are interested in becoming an instructor, please see the Hunter Education web page at https://wdfw.wa.gov/hunting/requirements/education/how-to-become-instructor

Ten Basic Safety Rules

- 1. Always keep the muzzle pointed in a safe direction and under control.
- 2. Treat every firearm as if it were loaded.
- 3. Keep your finger off the trigger until ready to fire. Use your safety, but remember that safeties sometimes fail.
- 4. Be sure of your target and what lies beyond before firing.
- 5. Never place or carry a loaded firearm in a motor vehicle.
- 6. Never use a firearm unless you are familiar with how it works. If you need an owner's manual, write to the manufacturer.
- 7. Never cross a fence, climb a tree, cross a stream or jump a ditch with a loaded firearm.
- 8. Never point at anything you do not want to shoot.
- 9. Unload firearms when not in use. Store firearms and ammunition separately.
- 10. Never use alcohol (or drugs) before or during shooting.

Learn More about WDFW's Hunter Education Program

Website

http://wdfw.wa.gov/hunting/huntered/

Email

huntered@dfw.wa.gov

Regional Offices

Region 1 Spokane Office:	(509) 892-1001
Region 2 Ephrata Office:	(509) 754-4624
Region 3 Yakima Office:	(509) 575-2740
Region 4 Mill Creek Office:	(425) 775-1311
Region 5 Vancouver Office:	(360) 696-6211
Region 6 Montesano Office:	(360) 239-4628
Headquarters Olympia Office:	(360) 902-8111

More Information

For more information about the Hunter Education Program, contact our staff in Olympia at (360) 902-8111.

Washington Department of Fish and Wildlife

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If you need further assistance or information, please contact the Olympia office of the Washington Department of Fish and Wildlife: (360) 902-2349, or Telecommunications Device for the Deaf (TDD), (360) 902-2207.